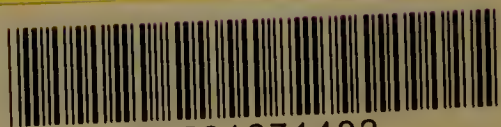


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Descriptive Catalogue

OF THE

READING MUSEUM.

PART I.

ETHNOLOGICAL COLLECTION.

BY

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Reading:

BEECROFT AND ALEXANDER.

1896.

Wellwood Library
for the History
and Understanding
of the ...

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Preface.

IN preparing a Descriptive Catalogue of the Ethnological Collection in the Museum, the object has been to furnish visitors with an introduction to the contents of the cases, and to the intention of their arrangement. From the articles having been received at widely different periods, and from insufficient space at the time of their arrival, some of the groups constituting the Ethnological Series hardly follow so consecutively in the cases as might be desired. On the whole, however, the arrangement has been sufficiently maintained to show, as may be seen in the Catalogue, some instructive examples of local art developement from savage life to civilization.

To prevent the undue crowding of the cases with foreign materials, the reception of objects has of late been chiefly confined to those found in the town, or in the surrounding districts. This has been done in order to maintain the individuality of the Collection, and to meet the views of eminent authorities that the chief object of a local Museum should be the cultivation of local scientific and archæological research. On this head, the following are quotations from the *Report on Museums* issued by the *British Association for the Advancement of Science*, in 1887. "Provincial Museums should chiefly devote themselves to the thorough and complete working out of the productions of their own districts."

* * * "The immense scientific and social value of such work would much better repay the cost and labour than the fragmentary and often aimless collections which are now gathered from all quarters of the globe."

The Museum practically came into existence with what is known as the *Bland Collection*. This fine series of antiquarian relics, and of modern ethnographical objects from various countries, was obtained by the late Mr. Horatio Bland, who built a Museum for its reception on Burghfield Common. At Mr. Bland's decease, the Collection was presented to the town, for the use of the Museum, by his Executors, and was removed from Burghfield in September, 1882. The Museum was not opened for the reception of the public till about a year later than this. In reference to its progress it might be stated that from 1882 to 1891 the large room alone was available for general museum purposes. The present Silchester Room was then occupied by the Art Series; but in 1891, the introduction of the Silchester Collection as a permanent loan, through the kindness of His Grace the Duke of Wellington, rendered further space necessary, and the Art Collection was removed to its present site. At the same time another room was made over to the Museum for the reception of the Architectural portion of the Silchester Loan, and the small room adjoining it was assigned to the Curator.

A Catalogue of the Silchester Collection has been enquired for, but that cannot be proceeded with till the excavations are completed. Every fresh addition renders some re-arrangement necessary, and the new articles would not appear in a Catalogue issued at the present time. While on the subject of Silchester, it should be named that when Mr. Cooper left Silchester Farm he had in his possession a series of Roman coins which had been picked up from time to time; and in order that they should not be lost to the Museum, they were purchased by Mr. Alfred Palmer, and are now arranged and labelled in the Silchester room in Mr. A. Palmer's name.

Another matter with regard to Silchester should not be lost sight of, viz., the necessity of maintaining the Collection wholly unmixed with other remains. Since 1890 the adoption of this method has worked satisfactorily to the public, and to the approval of authorities on the proper working of Museums. And it is essential in order to render a Catalogue effective. In the Silchester Collection, Reading

possesses the remains of an ancient city which since 1890 has been systematically excavated by the Society of Antiquaries. It is the only example of the complete exploration of a Romano-British town in England, and the Collection of relics obtained thereby is quite unique. We value Roman history for its teaching, although its details are sometimes misty. Why should we not treasure Roman facts, concerning which there can be no doubt? These, apart from other considerations, should claim for the Collection an individuality which should not be adulterated.

That the Museum has maintained its interest the gradual increase in the visitors testifies. The first Report, issued in 1884-5, gives a total of 50,000 for that year. Ten years later, in 1894-5, the number is stated as 59,350; and during the last six months, or from April to September, 1896, the attendance is registered as 32,619, which is the highest total hitherto recorded. The method of taking the numbers may be somewhat irregular, although systematically conducted; and it has been carried out on the same principle from the beginning.

In 1891, at a public meeting at the Town Hall, at which the Mayor and Corporation were officially present, a bust of the Hon. Curator, for the Museum, was unveiled, and an illuminated address presented to him by the Mayor, Mr. Alderman Heelas, in recognition of services in the Museum. The bust was the outcome of a proposition made by some influential inhabitants of the town, including the Mayor, and Mr. W. I. Palmer, the Chairman of the Free Library and Museum Committee, that there should be a testimonial. The bust was the work of the eminent sculptor, Mr. W. C. May, and it was carried out by public subscription.

The publication of the present Catalogue, *Part I*, will be followed by the *Second Part*, which will embrace the Geological and Natural History contents of the Museum. The Collection might with advantage be supplemented by an addition to the local birds, and to the fossils from the Reading Tertiary beds. The local Flora also, which in the neighbourhood is peculiarly rich, would be a valuable addition.

It will be observed that generally throughout the Catalogue the names of Donors or Depositors alone are given with the articles, as in every instance full particulars are written on the cards in the cases, and are registered in the Museum Book.

The present opportunity is taken of thanking Donors and Depositors for their valuable assistance to the Museum. There are at the present time deposits in the Museum which have been exhibited for some years, and as they are important in helping to complete the Ethnological Series, and could hardly be of equal usefulness elsewhere, perhaps their owners will kindly take into consideration the necessity of making their deposits permanent.

J. S.

READING,

November, 1896.



Contents.

PRE-HISTORIC AND EARLY				Page.
HISTORIC.				
			Page.	
Palæolithic Series	...	...	I	
Cave Series	...	...	7	
Irish Deer	...	...	10	
Shell Mounds	...	...	11	
Neolithic Implements	...	...	13	
Swiss Lake-Dwellings	...	...	18	
Gas Works Series	...	...	23	
Pit-Dwellings	...	...	25	
Palæolithic, Neolithic and				
Bronze	...	...	27	
Bronze Series	...	...	28	
British or Celtic Interments	...	...	32	
Babylonian Relics	...	...	36	
Egyptian Relics	...	...	38	
Early Greek Pottery	...	...	40	
Greek and British Coins	...	41-2		
Romano-British Relics	...	42		
Roman Coins	...	48		
Romano-British Interments	...	48		
The Saxons	...	51		
THE MEDIEVAL DIVISION.				
Old Reading Pottery	...	...	55	
Venetian Glass	...	...	61	
Sandstone Effigy	...	...	62	
Ecclesiastical Tiles	...	...	63	
Abbey Tokens	...	...	64	
Mediæval Relics	...	...	65	
English Arrow-heads	...	...	66	
Spurs	...	...	67	
Spoons	...	...	68	
Keys	...	...	69	
Buckles	...	...	70	
Finger-Rings	...	...	71	
Wig-Curlers	...	...	72	
Tobacco-Pipes	...	...	73	
Hour-Glasses	...	...	74	
Gibbet-Irons	...	...	74	
Scolds' Bridles	...	...	75	
Leather Bottles and Cups	...	...	76	
Rush-Holders	...	...	77	
Chained-Bible Table	...	...	78	
Bells	...	...	79	
Padlocks and Fetlocks	...	...	80	
Bits and Stirrups	...	...	82	
Strike-Lights	...	...	82	
Pin-Making	...	...	83	
The Corporation Pewter	...	...	84	
English Coins	...	...	85	
Lead Tokens	...	...	86	
Trade Tokens	...	...	86	
Mr. J. B. Monck's Tokens	...	...	90	
Iron Weapons, &c.	...	...	91	
Various Relics, &c.	...	...	93	
Human Crania	...	...	97	
FOREIGN SERIES.				
The Bland Collection	...	...	99	
New Guinea Group	...	...	102	
Soudanese Group	...	...	103	
Mixed Wall-Group	...	...	104	
Upper Burmah Group	...	...	104	
British Guiana Group	...	...	104	
West Australian Group	...	...	105	
The Congo Group	...	...	105	
North African Pottery	...	...	106	
Miscellaneous Articles	...	...	107	
American Series	...	...	108	



PRE-HISTORIC AND EARLY HISTORIC.

Palæolithic Series.

TABLE-CASE No. 1.

SINCE 1879 a great number of flint implements of the Palæolithic Period have been found in the gravel-drifts along the course of the Thames valley at and near Reading, and, indeed, in the gravels of the tributary valleys, the Kennet and Loddon. In a note from Prof. Prestwich in 1880, it appears that implements with Mammoth remains were met with at Oxford at about the same time; and discoveries of Mammoth and implements have since been made at Wallingford, and of Mammoth and Horse at Moultsford. It will not be necessary to refer to the formation of the gravel, in which Palæolithic implements are found, in detail, but as an outline it may be stated that before the valleys existed the neighbouring hills which now stand out in bold relief or buttress the vales were practically of one level and lay beneath a shingled sea-bed, which from the gradual up-lifting of the land was becoming increasingly shallow, and at length emerged from the water. The climate was then glacial and of great severity. As the land continued rising the retreating sea, with the aid of ice, attacking its own sea-bottom shaped the marine plateau into creeks and estuaries, leaving undenuded portions standing as small islands. These elevations, with sundry subsequent modifications, are the prominent hills of the district, which still bear on their crests remnants of the old sea-bed. Marine denudations still continuing, the sea ultimately cut its way down to the chalk, and into it, outlining the Thames basin, in short the general valley system. Previous to the post-glacial operations came the spread from the north of the glacial-drift over

the cretaceous surface. The Thames valley was not then eroded, but the northern gravel becoming cut through, as the work proceeded, terraces of it were left on the higher levels, which are known as plateau-gravel. All this, with the post-glacial erosions of rain and rivers in completing what the sea had begun, occupied an enormous period. But the work done by the rivers was of comparative insignificance, for according to Prof. Prestwich the isolated hills, passes, and wide plains are due to sea action, while that accomplished by fresh water is of no great depth or width. At length, the post-glacial conditions came on and the climate moderated, but it was still very severe. During the long winters the accumulations of ice and snow on the higher grounds, coming down in the spring, with the heavy storms of what has been called the "Pluvial," or rainy period, cut out the ridges more definitely, scooped hollows, and cut ledges or platforms in the more yielding materials of the valleys, on which gravel and other debris brought down by the water settled down. Lakes also formed in the lines of drainage, which left their beaches, as the valleys deepened, to become the gravel terraces, at various levels, as we now see them, and in which are found the early implements made by man.

The valleys were at the outset of course shallower and wider, extending for miles probably in flooded seasons. Taking the Thames valley for an example: on Caversham Hill, implements are found in drift gravel at about 120 feet above the present Thames level, and even higher, as in a drift near the "Packsaddle" Inn. The height is not so remarkable, but it implies that at the time the gravel was laid down a wide lake must have extended over the present Thames valley. Further, as the valley became deeper the higher drifts were often cut down by floods which rose above them, and carried their constituents to lower levels. In this way water-worn implements in the lower gravels, and materials from the plateau-gravel, and fossils not local, may be accounted for. Ice was an active agent, as Coast-ice, and Ground-ice, in transporting materials from place to place, and in cutting out and scarping the river-courses. During the winter, the water freezing around flints, pebbles, pieces of chalk, etc., under the relaxing influence of diminished temperature, lifted these bodies and carried them along the streams, often blocking them and causing floods, ultimately becoming stranded and leaving the materials as the ice

dissolved. In this way have come the large flints and other extraneous bodies not unfrequently observed in drift-gravel.

At what time the rugged makers of the implements entered the Thames valley it is impossible to determine; but their presence is traceable in various gravels during a considerable portion of the valley denudation. But the traces are more commonly present in the middle drifts, at the levels perhaps of from 60 to 80 feet. Evidences of this are furnished by Grovelands and Redlands, the lower levels at Caversham, and the middle level at Shiplake and other places. Mr. Treacher, of Twyford, who has made a handsome collection of Palæolithic implements from many localities in that district, informs me that he seldom looks without success for implements at the levels above-named. The natives must have been tolerably numerous from the number of implements discovered, and the large area over which they are scattered. Doubtless, they traversed the district with their families, clothed with skins, subsisting by hunting and fishing, and halting at various places to construct tools and weapons, leaving their refuse, which became buried underneath the gravel, and thus accounting for what are called "working-sites." Although numbers of implements are found they are not usually found together, but singly, the gravel between representing considerable intervals of time. So that an implement left here, another dropped there, a third or perhaps several washed in from above sufficiently account, with time, for the numerous specimens discovered.

Of the large animals which traversed the districts at the same period the same obtains. The Museum contains the following species from the local drift deposits. The Mammoth (*Elephas primigenius*), Woolly Rhinoceros (*Rhinoceros tichorhinus*), the Great Ox (*Bos primigenius*), the small Forest Horse (*Equus fossilis*), another Ox (*Bos Sp.*), and the Red Deer (*Cervus elaphus*). Their remains are not found in all drifts, but are sufficiently distributed to imply that they were a general and not a local fauna. The Mammoth has been met with at Oxford, Wallingford, Moulsoford, Reading—in several places, Caversham, Henley, and Taplow. These animals were bulky, and wild, and necessarily wanderers for their food in a climate such as then prevailed. The finding evidences of their presence at certain points implies that they

inhabited the areas between. But there is no doubt that they occupied the entire Thames valley, and far wider districts as circumstances permitted.

Animal Remains from Local Drifts.

HALF-OCTAGON CASE, No. 1.

A Mammoth's molar from Taplow. (*Mr. J. Rutland*).

A left lower molar of Mammoth, from St. Mary Bourne. (*Stevens*).

A molar, six fragments of molars, and a number of plates of teeth of Mammoth, from Groveland's Drift. (*Stevens*).

Two portions of molars of Mammoth from Grovelands drift. (*Stevens*).

A molar of Mammoth from Caversham. (*Mrs. Marshall*).

A molar of Mammoth (*Elephas primigenius*) from Taplow. (*Rev. C. Kerry*).

A molar of Mammoth, from Taplow. (*Mr. J. Rutland*).

A large molar, and fragments of teeth of Mammoth, from Kennet's mouth gravel. (*Mr. H. H. Jones*).

A molar of Mammoth from Taplow drift. (*Miss Lambourne*).

A Mammoth's molar found in chalk drift at Crowmarsh. (*Davies Coll.*)

Fragment of a tooth. (*Mr. Farmer*).

A right lower molar of Asiatic elephant. (*Bland Coll.*)

A left lower molar. (*Mr. Bradley*).

Two pieces of Mammoth's tusk, from the Kennet.

Fragments of Mammoth's tusk, from Henley road gravel. (*Stevens*)

Plates of Molar, and other Mammoth fragments, from the Henley road drift. (*purchased*).

Pieces of bones of the Large Ox (*Urus*) from the Henley road gravel, Caversham.

A vertebral bone. (*Mr. L. Treacher*).

Remains of Mammoth and Horse, from Moultsford. (*Mr Costiff*).

Teeth of Horse (*Equus fossilis*), from Grovelands. (*Stevens*).

Teeth of Horse (*Equus caballus*), from Grovelands. (*Stevens*).

Bones of Ox (*Bos Sp.*) from Grovelands. (*Stevens*).

A coronet and pieces of antler of Stag (*Cervus elaphus*), found with stone implements, at the base of the gravel, at Grovelands. (*Stevens*).

Similar fragments of antler with implements; and a coronet and some snags of Red Deer also from Grovelands. (*Stevens*).

A right upper tooth of Rhinoceros (*Rhinoceros tichorhinus*), from Taplow gravel. (*Miss Lambourne*).

Two teeth of Woolly Rhinoceros (*R. tichorhinus*), dredged from the Thames. (*Stevens*).

Among the fossils, etc., found in the Grovelands drift, may be named *Terebra*, *Ostrea dilatata*, an *Ammonite*, *Ananchytes*, and *Cidaritis*, with rolled lumps and small pellets of chalk.

The teeth of Rhinoceros dredged from the Thames were most likely washed out of gravel drifts above the river. The animal remains found in the drifts are mostly in bad condition, the teeth of Mammoth being frequently broken up into plates. The age of the animal is indicated by the number of plates in the molar. In some instances the fragments are shelled molars. The lower molars are known from the upper by being slightly concave, and the upper convex, so that they work uniformly on each other like millstones. And the right tooth is known from the left by its curve corresponding with the curve of the jaw. A very large tusk of Mammoth was found in the gravel alongside of the Henley road, at Caversham, in 1885. While undisturbed it appeared quite solid, but broke up into fragments the moment the material around it was disturbed.

The Palæolithic or Old Stone Implements in the Museum from local gravels number 352, from various contributors.

IN FLOOR-CASE NO. I.

A large lengthened oval implement from Ruscombe, a long pointed implement from Maidenhead, and pointed implements with unwrought butts, from Furze-Platt, Cookham, Iver, Twyford and Boyne-hill, 13 in number. (*Mr. L. Treacher*),

A large oval implement from Earley brick-kiln, and a well-wrought knife form, from Maidenhead. (*Mr. G. W. Smith*).

A small oval implement from Shiplake. (*Mr. Warner*).

A small oval implement from Shiplake drift (purchased), and 2 pointed forms with unwrought butts. (*Stevens*).

Eleven implements, oval and pointed, much water-worn, from Hill Head, Hants. (*Cooksey Coll., purchased by Mr. W. I. Palmer*).

A broad-pointed oval implement, from Earley (*Mr. Kimber*).

A small lengthened oval implement from Maidenhead. (*Mr. Stuart*).

A small oval implement, from East Sandcliff, Bournemouth. (*Mr. Wilder*).

A pointed form (*Mr. Phillips*).

A pointed-oval implement, from Burghfield Common. (*Mr. T. W. Colyer*).

A trimmed-flake from Caversham. (*Mr. H. S. Barrett*).

Two small oval implements from Canterbury and Reculver. (*Mr. F. Brent*); and a boring tool from Mr. G. H. Morell,

A pointed-oval implement from Bois-de-Rocher, and a trimmed-flake from Le Moustier, France. (*Mr. L. Treacher*).

In Central-Case, No. 16, upper shelf. Implements from the river-drift of the Somme valley, St. Acheul, near Amiens, France, deposited by Mr. O. A. Shrubsole. They are in form of the usual oval, lengthened oval, pointed oval and spear-shaped, the shapes graduating into each other. And there is one pointed with an

unwrought butt, and four scrapers. And in the same Case is placed a pointed oval implement from the Somme valley drift, from Mr. H. M. Wallis. The interest in these implements largely centres in their great resemblance to English forms. There was land communication at the period of their formation between France and Britain. The rivers of both countries were cut out under similar conditions; and men and animals had unrestricted range from one country to the other.

Mr. Shrubsole has been for many years a diligent explorer of the local drift for Palæolithic implements, and lately he has discovered very rude forms in the plateau-gravel about Finchampstead in this county.

Floor-Case No. 1 also contains a collection of implements chiefly local; but among them are examples from St. Mary Bourne, Hants, Newbury, Bradfield, and Shiplake. The local drifts are those of Grovelands, Coley, Redlands, the Prospect-park gravel, Earley, Caversham Hill, and Lower Caversham. The implements are of the usual types: oval, and various forms of oval-pointed, to the lengthened spear-head forms. One example of this kind is a long spear-pointed implement from Caversham Hill, which is not so remarkable for its size as for its fine outline and neat flaking. Other implements are more or less rudely pointed, with unwrought butts for grasping; cores and large knife-like flakes, and knives with cutting edges and plain backs; awls or borers, one with an especially good point apparently for holing garments of skin; large heavy cutting tools called choppers; and various hammer-stones for crushing bones or making implements; tools with well-wrought flat edges, perhaps knives or planes; and a variety of scrapers, some resembling Neolithic scrapers, and others large and less carefully wrought, and like cave implements. One pointed-oval implement is peculiar in having a natural hole in its centre, which conveys the impression that it was left for the purpose of carrying a handle. There are two specimens apparently from older drifts, one a scraper of chert the other an implement of quartzite; and a string of so-called "fossil beads" (*Orbitolina globularis*) from the chalk; but there is no proof that they were used by early man. (*Stevens Coll.*)

In looking over the contents of *Table-Case 1*, it would be well to contrast the Palæolithic with the Neolithic implements. The

former it will be observed are larger and more coarsely wrought, and bear the peculiar yellowish colour from contact with the iron of the drift-gravel in which they are found. There are no small finely-wrought arrow or javelin-heads or polished implements among them. The Neolithic, on the other hand, are in greater variety; and as a rule smaller, and they include delicately wrought arrow-heads and javelin-points, and implements finely polished after chipping. Their colour is commonly whitish from long contact with calcareous surface soils, and exposure to light and atmosphere. They convey the impression of advanced workmanship over the ruder implements of the earlier period. Another point refers to the materials used during the two eras. The older men employed flint, which they obtained promiscuously, with sometimes a little chert and quartzite from the older gravels. The later men, on the other hand, dug their flint, finding it more workable, and in districts where flint was not obtainable they used other stones, such as felstone, diorite, greenstone, quartzite, basalt, and other tough materials which could be brought to a cutting edge by grinding.

In collecting implements it is common to meet with imperfect specimens, and waste, in the shape of tools begun apparently but thrown aside as useless. While some are so bungled, although evidently finished implements, as to lead to the impression that they came from older sources, perhaps from the high-level gravels. The writer collected quite a cartload of such which could not be utilized. It would be better if a series of rude forms could be arranged, as sufficient perhaps might be selected to show developement from the earlier rude implements to the higher types, which are too frequently the only examples exhibited in Museums.

Cave Series.

TABLE-CASE NO. 8.

The small series of relics from the caves of the Dordogne, South of France, came from the British Museum through Mr. C. H. Read. In the limestones of cretaceous age along the valley of the Vézère, which is a tributary of the Dordogne, not less than ten caverns and rock-shelters have been explored, and their contents registered.

Rock-shelters are not caves in the ordinary sense, but over-hanging masses of rock, underneath which savage tribes took shelter from time to time. Here they made their fires, and cooked their food, using heated stones for that purpose, if we judge from the number of "pot-boilers" found on the floors. Their arts of life were of the simplest, for they appear to have been ignorant of the potter's art, and of spinning and weaving; and among their stone implements no polished specimens have been found. But from the quantity of flint scrapers discovered, some of which resemble those made by the Esquimaux, there is no doubt that they were largely used in the preparation of the skins of reindeer and other animals for clothing. From the shape of some of the scrapers it seems likely that they were hafted after the manner of Esquimaux scrapers. The suggested method of clothing with skins is corroborated by the presence of bone needles with well-wrought eyelets which were employed to sew the skin garments together with threads made most likely from the sinews of deer. .

The caves which yielded the articles arranged in the case are Le Moustier, Laugerie Haute, and Le Madelaine. The first, or Le Moustier, occupies an elevation of 90ft. above the Vézère, it is therefore older than the lower rock-shelters. Remains of Mammoth and Hyena were found in it, but no wrought bones or figures of animals carved on bone; and the flint implements were of the drift types, particularly the scrapers, some of which resemble scrapers from the Thames drifts. Laugerie Haute is a rock-shelter on the right bank of the Vézère. Here the implements were better wrought, particularly the chipped flint lance-heads, which came closely in character to those found in Denmark and in England. Flint drills also were present; but harpoons and arrow-heads of bone were not plentiful. From the rock-shelter, La Madelaine, most interesting relics were taken, particularly those showing carvings of animals on bone and ivory. The implements discovered here came nearer in type to those of the Neolithic Era. Well-wrought needles with eyelets, and harpoons of bone, ornaments of shell, and scrapers for cleansing skins or planing wood were taken from this rock-shelter. And of the sculptures on bones, designs of reindeer, horses, and bison were found. As expert copyists, the rude cave-men appear to resemble the Esquimaux, who decorate with carvings of reindeer their bone tools. The Esquimaux also

construct some of their implements from the ivory of the fossil Siberian Mammoth. The cave dwellers, in like manner, living at the same time as the Mammoth, carved on the Mammoth ivory a portrait of the animal. Recent explorations in a cave of the Dordogne revealed carvings of animals on its walls. The association of these men with reindeer, the musk ox, and the wolf, shows that the climate in the South of France during the reindeer period must have been cold, and suitable to the habits of animals, such as now, in association with the Esquimaux, inhabit the Arctic regions.

LIST OF RELICS FROM THE CAVES IN CASE 8.

From Le Moustier.	From La Madelaine.
A flint scraper and flakes.	Cut bones.
From Langerie Haute.	Bone implements.
Articular end of <i>Cervus</i> .	Wrought needles, one with an eyelet.
From Dordogne Caves not named.	Articular end of cannon bone of
Phalanges of Reindeer.	<i>Bos</i> (?)
Teeth of <i>Bos</i> .	Ordinary flakes.
Molars of Horse.	Acutely pointed flakes.
A chisel or wedge.	A scraper and long flakes.
Flint flakes, and a flint core.	
A Human frontal and an articulation of an Ulna of Deer apparently from a Limestone Cave, Wye Valley. (<i>Mr. C. Cooksey</i>).	

FIRST CENTRAL CASE No. 16, RIGHT SIDE, DIVISION 1.

The contents of this Division are chiefly remains presented by Mr. E. B. Poulton, of Oxford, and discovered by him in a reconstructed bed of the Quaternary Period, at Redlands, Reading. The elevation here is 39ft. above the present Thames level. In the river-drifts, but chiefly in association with the sand were found mammalian remains, and silicified tree-trunks of the genus *pinus*. The sands lay underneath some clay and ochreous flint gravel, and both sands and clay were found occupying a somewhat lower level in front of the mottled clay and buff sands of the Woolwich and Reading series from which they had been reconstructed. The animal remains were two molars and fragments of molars of Mammoth from between the sand and gravel, and portions of the skeletons of Mammoth in the sand and gravel. Portions of *Bos primigenius* in

the sand; and of *Equus fossilis* between the sand and gravel; and an articular surface of an *astragalus* bearing the character of *Rhinoceros tichorhinus* in the gravel. The portions of Pine-trunks occurred wholly in the sand-bed, and chiefly towards its base. The derived remains in the shape of shells, etc., were found in the same deposits as the mammalian relics, and consisted chiefly of worn fragments of *Ostrea dilatata*, *Inoceramus*, *Ostrea bellovacina*, and shell-masses from the basement beds of the London clay.

MAMMALIAN AND OTHER REMAINS FROM THE QUATERNARY
SAND, REDLANDS, READING.

A bladebone of Mammoth (*Elephas primigenius*).

A lower right molar of Mammoth.

Ostrea Bellovacina and *Ostrea dilatata*.

A fragment of a Belemnite.

Quartzite from the high-level gravel.

Fragments of forest marble.

Fossil pine-wood. (*Mr. Hicks*).

Remains of *Bos Sp.*

Remains of Horse (*Equus fossilis*).

Remains of *Pinna* from the sand.

Green-coated nodules.

Fossils derived from the white chalk, viz., scraps of *Inoceramus*, *Ananchytes ovata*, and *Galerites albugalerus*.

A flint flake.

Mounted *Pinus* fibres.

Palæolithic implements from Redlands gravel: a pointed implement, a trimmed flake, a knife form, and a small oval hatchet. (*Stevens Coll.*)

Gigantic Irish Deer.

ON THE EAST WALL, OVER CASE 5.

The Head and Horns of Gigantic Irish Deer (*Megaceros Hibernicus*, Owen), presented by the late Mr. E. West, of Caversham. It is known also as the Fossil Elk; and in this instance the specimen came from Canada. But that is not material, there being no difference between the American and the Irish species; for at the time the animal lived there was land communication between North America and Ireland through Greenland, the Faroe Islands and Iceland, so that the animal had a wide range. The span of the horns is 9 feet, and the length of each antler 6 feet.

The palmate portion of the horn has a span of 18 inches, and a depth of 33 inches, with 11 points, so that the animal was an adult. The left brow-tine is duplex at its extremity, and the right one three-forked, which is not common. The circumference of the coronet is 13 inches, and the weight of the head from 75 to 80 pounds. The weight of the skull and antlers of *Megaceros* in the Museum of the College of Surgeons, London, is 76 pounds, and that of a specimen in the Museum of the Royal Dublin Society is 87 pounds. The animal has been found in many localities in England, and when associated with peat is usually met with in the shell-marl underlying the peat. It is well-known as having lived at the same time as the maker of the "Old Stone" implements, and that it became extinct in pre-historic times.

Shell-mounds.

CENTRAL FLOOR-CASE NO. 16, LEFT SIDE, DIVISION I.

"Shell-mound" and "Coastfind" remains are similar in character, and are represented in the Museum by some relics of the former from Denmark, where such accumulations are largely found. They are present in many countries, and are modern as well as of ancient date. The Danish Shell-mounds are called *Kjökkenmöddings*, from *Kjökken* (kitchen) and *Mödding*, the equivalent of our midden or midding, a refuse-heap. Thus, the carrion crow is known in some districts as the "Midden-crow," from its habit of eating garbage. The Shell-mounds are simply accumulations of the remains of shell-fish and other animals around the miserable dwellings and resting-places of savage fishers and hunters along coastlines. From their extent they must have been visited over very lengthened periods; and similar mounds are still in the process of formation among such degraded peoples as the Fuegians and the Australians. The Danish mounds are frequently not less than 300 yards in length, 100 to 200 feet in breadth, and 10 feet in thickness. Such remains have been examined and reported on in the Malay Peninsula, Tasmania, Australia and in America; and Shell-mounds occur in our own

country, as in the Orkneys, Caithness, and along the coasts of Devon and Cornwall. In the Caithness mounds, as in Denmark, bones of the Great Auk (*Alca impenis*) have occurred. As might be inferred, the commoner forms of shell-fish are more frequently present, as the oyster, cockle, mussel and periwinkle; and among fish the herring, dorse, dab, and eel. Fragments of blackened hearthstones and charcoal ashes sometimes occur, the last evidences of their squalid dwellings; and with them flint knives, scrapers, cores, hammers, wedges, axes and lance-heads of rude form are found, but polished implements are not frequent. Their pottery is of a coarse kind, and sparse in quantity, showing that the mound-builders were not largely potters. Bone pins, horns, and sling-stones are other listed articles. There is little to show the method adopted by the natives of opening the molluscs; but a suggestion on this head might be gleaned from the Indian women on the Columbia, who collect big clams for food, and open them with hot pebbles, extracting the clam with a pointed stick. A similar plan is used by the New Zealanders in opening mussels. Bones of birds are frequent in shell-heaps, but they are chiefly of sea-fowl; and with the entire bones of animals, are bones split open or crushed for their marrow. Domestic animals are conspicuous by their absence, with the exception of the dog, whose flesh was eaten for food. Among the wild forms, the stag, roe-deer, fox, wolf, and wild boar have been recognised. On the whole the Danish Shell-mounds represent a period referable to the early part of the Neolithic Stone Age, when the art of polishing stone implements was known, but before it had reached any considerable development.

ARTICLES FROM A KITCHEN-MIDDEN AT BILIDT, NEAR
FREDERICKSUND, DENMARK.

Presented by Dr. Hurry.

Rude hatchets, javelin-flakes, long-flakes, knives, scrapers, and cores.

Shells:

Univalves { *Littorina*.
 { *Nassa*.

Bivalves { *Ostrea*.
 { *Cardium*.
 { *Mytilus*.

Charred wood.

Fragments of blackened stones from
a native hearth.

Neolithic Implements.

FLOOR CASE NO. I.

The Neolithic or Later Stone Implements are rarely met with in drift-beds, and when present they may be considered intruders, and not part of the gravel formation, should the gravel not be a recent superficial wash. They are ordinarily found on the surface of the soil or a few inches underneath it, and are brought up in the process of agriculture. The face of the country at the period of their formation was much the same as at the present day. The valleys were scooped out and silted up, but were in a comparatively marshy and untenable condition. They were traversed probably for purposes of fishing, as polished, and other flint implements are found in the river beds, of which the Thames and Kennet furnish examples. The open hills were more suited to a pastoral people with small herds. And that they selected the uplands and hills—probably for the sake of pasturage and protection, and from the vales being wooded and marshy—we have the evidence of their rude pit-huts, and small circular camps built for the protection of themselves and cattle in times of danger. Here also they buried their dead in large earth-mounds of greater length than width, known as “long-barrows.” Some of their huge mounds contain stone cells or chambers, in which the dead were sometimes placed in a sitting position, and the earth becoming denuded the cells are left standing, and are called *Cromlechs*. Unlike the people of the Palæolithic Age, the more recent stone workers had learned to polish their implements by rubbing them on grindstones; and they had acquired the art of making pottery, which they fashioned with the hand, and baked in an ordinary fire. They are believed to have taken some small steps in agriculture, the strips known as “terraces” on the hills being attributed to their spade husbandry, the work of the community; and it is remarkable that the terraces are sometimes found extending down the flanks of the hills in the lines of the water-valleys, marking the gradual progression into the vales. In addition to other industries, these people spun thread with the spindle, and weaved their thread into fabrics. At the same time they used skins for clothing, and perhaps to cover their rude

huts, small wrought stones, known as scrapers, being found abundantly with other implements, which there is little doubt were employed in cleansing and preparing the skins. Ethnologists consider the later stone workers as identical with the Iberians or Basques of the Western Pyrenees. They were a small dark-visaged race with lengthened skulls (*dolicho-cephalic*), the length being chiefly posterior. And their descendants are still traceable in Ireland and Wales, the small swarthy Welshmen of Denbighshire being considered as conspicuous examples.

Implements of the Neolithic Age are found in occasional scattered patches throughout the South of England. And the hut-villages and small camps of the people are sometimes traceable on the hills and downlands; but they are often so mixed up with later works that it is difficult to determine the Iberian remains from the Celtic or British. In the neighbourhood of Reading, implements, showing where flint workings have been carried on, are present on the higher grounds at Caversham, and along the hills above the Warren. At Whitchurch they are found, and on the flats by the river at Pangbourne and Goring. While Wallingford is a most prolific centre, the late Mr. Davies having made a large collection, especially of arrow-heads, of which some are in the Museum. From Newbury to Reading, along the line of the Kennet, implements are found at intervals; and immediately near the town, Tilehurst, Redlands, Coley, Southcot, Bob's Mount, and Whitley, may be named as having furnished specimens. Along the Oxfordshire hills from Caversham to Henley similar working sites occur, Mr. Stuart having collected specimens at "Bix," and other localities.

We are indebted to the men of the later Stone Era for our domesticated animals. Before their advent most of the wild animals which had traversed the country with the men of the earlier Stone Period had died out or departed. A few representatives survived, as the Brown Bear, the Elk, Wild Boar, Wolf, Red Deer, and the Wild Ox (*Urus*). But with the Neolithic herdsman came the Ox, Goat, Sheep, Dog, and Horse. Examples of these various animals found in Reading, together with remains of the huge ox, red deer, and wild boar, occupy the *Half-octagon Case No. 2*, at the end of *Floor-Case 1*, which contains the stone implements.

The following are some particulars of the Neolithic flint Implements, of which the series comprehends 804 English examples.

IN FLOOR-CASE, No. 1.

1.—A collection of stone implements, the gift of the late Mr. W. R. Davies, of Wallingford. They were obtained by him chiefly in that neighbourhood, and consist of arrow-heads, scrapers, and sling-stones; but there are a few polished axes, which were obtained from Ireland and the Thames, also a quartzite net-sinker, which might be of more recent date, and a heavy holed quartzite boulder. This last is remarkable. It is too heavy for a hammer-stone or club, and greatly resembles the holed stones used by African natives to weight their digging-sticks. Some of the arrow-heads are finely wrought, and they include barbed, tanged-and-barbed, and leaf-shaped forms.

2.—A series of polished and chipped flint implements, including axes, arrows, scrapers, flakes, cores, picks, hammer-stones, rubbers, wedges, sling-stones, drills, borers, etc., obtained in the neighbourhood of St. Mary Bourne, Hants; at Cissbury, Sussex; in the district around Reading, and at other localities, all of which are named on the labels. The flakes are very uniform, and could not have been waste, but might have been intended for arrow-tips to shoot birds with the bow, while the longer forms were perhaps used for punches in doing the finer work on arrow-heads and scrapers. The series includes a variety of well-wrought scrapers, some of which are rare, from the fields above the Warren. The longer of these implements were most likely mounted in handles of bone or wood; and models of Esquimaux scrapers are placed near them to show the methods adopted by that people of mounting in handles of fossil ivory. (*Stevens Coll.*)

3.—Two large wrought flints, perhaps cores from which flakes have been removed, but the longer form might be a coultter, or digging tool: from Pressigny-le-Grand. Also a collection of flint hatchets, picks, scrapers, fabricators, a wedge, flakes, etc., from districts around Ameins and Breteuil, France. These implements in character and patination are precisely like those found in England, and are the work of the same people. Among them are some pieces of broken polished implements which were subsequently utilized by chipping. (*Deposited by Mr. H. M. Wallis*).

4.—Some of the implements in the Case, found locally, have been purchased. But among the contributions the list comprehends a heavy quartzite axe, and a chipped flint hatchet found with charred timber and bones of animals at Clappers Island. (*Stevens*). A well-wrought narrow chisel polished at the edge. (*Mr. G. W. Smith*). Arrow-heads, scrapers, etc., from Cheltenham. (*Rev. J. H. Curdew*). Flakes, a knife form and scrapers. (*Mr. Stuart*). A polished axe found in the Kennet at Thatcham. (*Mr. Hugh Hawkins*). A polished pick from the Kennet at Reading, and a chipped axe, flakes, a knife form, and a net-sinker from the Thames, Cookham. (*Mr. R. E. Goolden*). Flint-flakes from Southcot. (*Mr. Fidler*). A large arrow-head, and a small chipped flint axe from Antrim, Ireland. (*Mr. Margrett*). A bored quartzite hammer from Newbury. (*purchased*). A quartzite hammer from Mapledurwell. (*Mr. Gilkes*). Arrow-heads from Bridlington, Yorkshire, and a knife from Tilchurst. (*Stevens*).

In *Central Case, No. 16*, are arranged scrapers, flakes, and other implements. (*Mr. Harrison H. Jones*). Small cores and rudely chipped flakes from Sandford, near Steeple Aston. (*Rev. E. Marshall*). A saw-flake, and a scraper. (*Mr. Sydenham*). Implements from Caversham. (*Stevens*). Implements from Slough. (*Mr. Wilder*). Hatchets, scrapers and flakes from Reading, Bix, Streatley, etc. (*Mr. Stuart*). Scrapers, arrow-tips, fabricators, hammer-stones, etc. (*Mr. Clark*). Chipped hatchets, etc., from Goring and Whitchurch. (*Stevens*). Small cores and flakes, with wrought slag from the Sussex Iron Works, the object being to show that the slag is later than the Iron Works; from Wakehurst, Sussex. (*Mr. C. Cooksey*).

5.—*Wall-Case No. 14*, contains a variety of the smaller stone implements from various localities, in illustration of the Neolithic Stone Period. Some of the specimens are rare. They are part of the Stevens Collection, and there are some well-wrought arrow-heads from Wallingford. (*Davies Collection*).

6.—*Central Case, No. 16, Upper Shelf of the Turret*, contains some finely wrought Neolithic implements, the donation of Mr. W. A. Pye, through Mr. Blackall Simonds. They are from various parts of Denmark—Aalborg, Zealand, Viborg, Jutland, Anholt, and other localities. The implements include the chipped and polished, and are of the highest type of work, the narrow chisels being beautifully finished; and the dagger and knives strongly resemble bronze weapons. The heavy axes are severely edged; and the axe-hammers neatly bored. The series comprehends barbed and barbed-and-tanged arrow-heads, long flakes, cores, adze-like tools, knives, one semi-lunar in shape, a dagger, polished chisels, polished narrow-chisels, heavy chipped axes, small chipped axes, chipped hatchets, a pick, a wedge, a borer, and perforated stone axe-hammers, &c.

In reference to the boring of stone hammers it might be suggested that the softer stones were holed by pecking with a fine chisel or pointed flake; but the harder materials it is thought were drilled with a round stick with sand, the stick being rotated after the manner of an auger. The writer has found that the work can be very well done with an elder stick and sand, the wood being hard and hollow cuts somewhat like a punch. In flaking the finer work on arrows and scrapers pressure was probably used rather than percussion. This can readily be done by placing a small implement on a stone as on an anvil and pressing the point of a stone awl or flake against its edge, when small scales are forced off; and bone tools have been found which are believed to have been used for flaking. The Esquimaux flake by pressure with an instrument made of fossil ivory. Percussion is used when large flakes are required to be removed, the blow causing vibrations to traverse the flint leaving ripple-like markings. In hafting, it is possible an early method was the fixing an implement between two

branches which grew parallel on the same stem, and this might have suggested hafting in a split stick. Later probably the implement was secured through a hole in a club-handle, and that some method of this kind was adopted is shown by so many of the axes being found fractured at their middle or upper third, implying that in striking a blow the shock was received at the point of impact of the blade with the hole in the handle.

A word might be said in reference to some of the rarer forms in the collection. *In Floor-Case 1*, the heavy quartzite axe, and chipped flint hatchet—which may be properly described as a “dig-out”—which were found with charred timber and bones of domesticated animals in Clappers Island, are remarkable. The axe is precisely the form of implement for shaping piles; and the hatchet with its unwrought butt and knife-like edge is such as would be required for scooping out the interior of a boat from a tree with the aid of fire. *In the same Case*, a chipped flint knife should be noticed. It has a severe edge, but the flaking on one side is wholly in the long axis of the stone, in the other in its short axis, or across it. This is rare, and a good example for any to study who are sceptical on the authenticity of flint implements. *In the same Case* are several broken polished implements, which have been re-chipped to restore their usefulness. *In the same Case*, a large beach-pebble hollowed at the sides, which was found by the writer on Portland Island, when out with the *British Archaeological Association*. On showing it to an old fisherman at Portland, he exclaimed, “that is one of our old net-sinkers.” This implement, then, being like the old Scandinavian forms, is a survival from Neolithic times. *In Wall-Case 14*, two Neolithic implements from Cissbury, Sussex, which are Palæolithic in form. *In Floor-Case 16*, a wrought flint, found at Mapledurham, which is grooved on its surface, apparently from rubbing bone pins. The stone has the appearance of sand having been used in the process; and it is worn and polished as if the pins had been finished off by friction against its sides.

Swiss Lake-Dwellings.

TABLE CASE NO. 3, AND CENTRAL CASE NO. 16.

The Lake-settlements of Switzerland first received attention in 1853, when the people of Meilen, on Lake Zurich, during dredging mud for the purpose of raising ground they wished to reclaim, discovered a number of piles driven into the bed of the lake; and at the same time stone axes, hammers, and various other implements, together with rude hand-made pottery were brought to the surface. Similar results followed the subsequent investigation of other lakes, from which it became evident that a race of people had inhabited the districts, who for security had built their houses on platforms supported on piles driven deep into the lake-beds. As soon as the discoveries became known classical historians remembered that Herodotus, the Father of History, describes a Thracian people who, in 520 B.C., in Prasias, a small mountain-lake of Pœonia, constructed their habitations on strong piles surmounted with a platform of planks, and connected their dwellings with the shore by a narrow bridge. They had trap-doors also, which opened on the lakes, as in the Swiss structures. But according to the historian they had one peculiarity in their domestic arrangements, which does not accord with modern experience of the habits of the animals, they fed their horses and cattle principally on fish.

Robenhausen on the lake Pfäffikon, and Schaffis on the lake of Bienne, the two settlements from which the relics in the cases were obtained, both appertained to the Stone Age. The former village is in a great measure the property of Mr. Messikomer, who has largely contributed to the investigations carried on, and the discoveries made there. It was ascertained by him that three successive pile-erectations had been built over the lake, of which the first, if not the second, was destroyed by fire, while the third was abandoned. Schaffis appears to have met the same fate; and several of the more delicate objects in the Museum bear testimony, in their charred condition, that they have been exposed to fire. It has been calculated by Mr. Messikomer that not less than 100,000 piles must have entered into the construction of the entire

settlement. While Mons. Troyon has estimated the population of the Lake-village at Wangen at 31,800 persons during the Stone Age, and 42,500 during the Bronze Age, reckoning the former to have existed from 5000 to 7000 years, and the latter from 3000 to 4000 years. But a considerable margin must be allowed for all such calculations.

Some of the Lake-habitations have passed through the several stages of Stone, Bronze, and Iron, of which the settlements of Nidau-Steinberg, Unter, Uhldingen, and Les Roseaux furnish examples. They appear all to have been constructed on a similar plan, save that the later dwellings were moved further from the shore; and in some cases they came nearer to resemble crannoges. Those desirous of obtaining knowledge of the Swiss settlements should refer to the interesting volumes of Dr. Keller, and to the pages of Mr. Munro for English structures. As a short sketch of their general form, it might be stated that they were erected on piles driven into the bed of the lake at a greater or less distance from the shore. That the piles were of the rudest, sometimes split stems, but often entire trunks were used with the bark on, and pointed with stone or bronze tools with the aid of fire. In some instances the piles were sustained by large stones sunk between them, in others the platform rested on a bed of brushwood or small trees. These received the name of "Fascine Dwellings." Another method was the fixing the piles to heavy frames of wood at the bottom of the lake. On these rough piles an equally rude platform was fixed; and on the platform rectangular dwellings were erected of "wattle and daub"—well known in some remote villages of the present day—which was a kind of hurdle-work plastered with loam or clay. Fragments of this material were constantly found hardened by fire when the dwelling had been burnt down. The huts were thatched with reeds, rushes or straw, and the building was connected with the shore by means of a platform on piles. This connection must have been of prime necessity, as the pile-dwellers were primitive farmers, and cultivated to a small extent wheat, barley, flax, and at a later period, oats, on the land. They grew vegetables also, and fruits, of which may be named peas, dwarf-beans, lentils, apples, pears, plums, cherries, raspberries, and blackberries. Their fire-places consisted of stone slabs placed to form a hearth, which doubtless was the centre of all the domestic operations. It was

here, when they had not small workshops, which were sometimes erected, that the rude pottery was hand-constructed, spinning and weaving were manipulated, cord, string, and thread wrought, tools of bone and polished stone received their finish, nets, net-sinkers, harpoons and hooks for fishing fashioned, spindle-whorls, hair-pins, and knitting-needles sharpened, and the mealing-stone brought into antagonism with the rough stone hand-muller in crushing grain for the preparation of meal-cakes. All the refuse was consigned to the lake-bed through apertures in the floor. It is not a matter for surprise therefore that such an abundance of relics were brought to light when beds of the dried-up lakes were explored.

During the Stone Age of the Pile-works the natives fed more largely on wild animals than on tame ones; but this became reversed in the Bronze Age. The domestic pig does not appear in the very early settlements, and the goats outnumbered the sheep; but in the end the sheep were far more numerous than the goats. Nevertheless in the earliest times domesticated animals were always represented, for from the first there were two kinds of ox, the sheep, the goat, and the dog. The more familiar ox was known as the "Marsh Cow" (*Bos longifrons*), the other was the big derivative of the wild bull (*Bos primigenius*). And there were two kinds of pig, the wild boar, and the smaller "Marsh Hog" (*Sus scrofa palustris*). During the progress of the Lake-dwellers some wild animals became reduced in numbers, as the bear, stag and roe-deer, while the elk and beaver disappeared altogether.

Lake-dwellings were not peculiar to Switzerland, as they have been observed over a large portion of the world. Indeed, the instinct of self-preservation appears to have operated wherever the district was favourable, and protection had to be sought against the molestations of man or beast. Thus, aquatic habitations have been observed in Cochin China, Japan, America, in European countries, as in Germany, France, Belgium, Italy, and in England, Ireland and Scotland. The Scotch and Irish dwellings are chiefly in the shape of Crannoges, which are later, and were small islets (*chraois*) in the lakes, of which the natives took advantage, and fortified with timber, or occasionally with stone, and were hardly ever connected with the shore by causeways. Ancient Mexico was erected on piles; and we have modern examples in the island dwellings of an Arab tribe in the marshes of the Euphrates, in the

habitations of the Caroline Islanders, and of the Papuans of New Guinea. Before leaving the subject it may be well to name that recently a Lake or Timber-village has been investigated in a dried-up ancient mere near Glastonbury, and relics discovered belonging to the several periods of Stone, Bronze, and Iron. The inhabitants had learned to mortise their timber together, and had used wattles. A lathe-turned wheel was found, and wheel-made as well as hand-made pottery, and iron reaping-hooks. On the whole the village comes near in character to the latest Swiss Lake-dwellings, and would appear to be late Celtic.

ARTICLES FROM SWISS LAKE-DWELLINGS.

Deposited by

Mr. O. A. Shrubsole.

TABLE-CASE NO. 3.

Charred cloth.

Carbonized bread.

„ grain.

„ wild apples.

Net floats.

Bone awls.

Awls of horn.

Bone arrow-points.

Mealing stones.

Flint saws.

Polished stone hatchets.

„ stone chisels.

(Some of these are mounted in stag's-horn; others are unmounted).

A piece of greenstone showing unfinished work.

Seven small bottles containing seeds of common flax, small-leaved flax, small Lake-dwelling wheat, bird cherry, garden poppy, hazel nut, and common hazel.

Part of the Stevens Collection.

CENTRAL TABLE-CASE NO. 16.

Stone axes and chisels (two mounted in stag's-horn, the others unmounted).

Flint arrow-heads.

A small flint saw.

A bone chisel.

A bone awl.

A large bone needle.

Charred cloth (different textures).

„ bread.

„ wheat.

„ barley.

„ wild apples.

A stone spindle-whorl.

A net-float.

Stag's-horn polishers.

A bone arrow-tip.

A clay ring. (It appears that these clay rings were used as trivets on which to stand vessels over hot embers).

A clay vessel (basin).

A plain bronze chisel placed with polished stone implements to show similarity of type.

The above articles are all labelled, and are from Schaffis and Robenhausen. The collection introduces some excellent examples of mounting stone axes in wrought antlers of red deer. Handles of

tough ash also were used. The material of the axes is greenstone ; but implements were in use of a variety of materials, of which may be named nephrite or jade, syenite, hornblende, flint, jasper, asphalt, chert, diorite, and serpentine ; and there were small celts and chisels of bone. But jade, flint and asphalt were not found in the vicinity of the settlements, and must have been obtained by commerce. The flint according to Mr. Keller came from France. Amber is another material found in pile-dwellings, which must have been a commercial introduction.

It is worth a remark that Lake-dwellers in their Stone Age should have been associated with an industry so advanced as weaving. The presence of various woven textures would lead to the conjecture that they might have been obtained by commerce, had not this been set at rest by the finding instruments, somewhat rude, used for weaving, such as warp-staves, and loom-weights, in the shape of holed clay-balls, cones, etc., for extending the threads for the reception of the cross-weaving. These various apparatus, with the food-stuffs, not less than eleven varieties of grain having been traced, stand in wide contrast to such primitive instruments as knives, saws, axes, and hammers of flint. Among other home industries the Lake-dwellers grew vegetables for the table, and plants for dyeing and making string, and even fungi for kindling fires, which were ignited by means of pyrites and flint flakes (*strike-lights*). Examples of such may be seen in the Museum from the neighbouring hills of Hampshire.

In the middle division of the *same Case, No. 3*, axes and chisels of greenstone, and bone, of similar character to those from the Pile-dwellings, are arranged to show various methods of hafting adopted by modern savages. The implements are part of the collection of Mr. W. G. Lawes, obtained in New Guinea. They demonstrate hafting in basket-sockets, by bark ligature, by plaited rush-sockets, and by the attachment of the handle with "sennit," a rough form of string.

EAST WALL, ON WALL CASE 5.

Five wood piles, with bones of animals, presented by Mr. R. G. Goolden, of Cookham. They were selected from about a dozen such of the same length, which were dug up at Cookham Lock.

They were rudely pointed and charred, and occupied a hole about 12 feet square ; and were observed standing perpendicularly in the gravel as if they had supported some building. The Thames at that point divides into three branches, and small islets are present along the river. These islets show traces of former streams ; and it is thought that when they were being silted-up advantage was taken of their isolated position to erect pile-habitations on them for fishing and protection. Some other suggestive remains have occurred along the river. The views expressed by Mr. Goolden in reference to the piles (*Journal of Berks Archæological and Architectural Society*, April, 1893), are corroborated by the finding bones of horse and ox at the same site, and fragments of pottery, which are undoubtedly late Celtic.

Gas Works Series.

CASE NO. 16, 2ND SHELF OF TURRET, AND FLOOR CASE 9.

These cases contain a variety of articles, and skulls of animals, which were obtained at the time excavations were carried on at the Reading Gas Works, on the north bank of the Kennet, in order to lay the foundations of an iron bridge over the Kennet, in 1880-81. As the digging proceeded a large quantity of bones, recent and extinct, were thrown out, with pottery and other objects of various dates, which Mr. Baker, the manager of the Gas Works, directed to be placed in a room in order that they might be subsequently examined. The retention of everything likely to be of interest was the work of Mr. Smith, who superintended the operations ; and from these a selection was made of skulls of animals, and small articles for domestic use, of considerable interest and scientific value. As an instance, the Beaver may be named, an animal hitherto found only in one locality in Berkshire, viz., in shell-marl in the Kennet valley at Newbury, with similar animal forms to those from the Gas Works (see *British Fossil Mammals*, Owen, pp. 197—200). The collection was presented to the Museum by the Board of Gas Directors.

A variety of articles recent and later were taken from the upper silt of the river. These will be referred to in proper sequence. But the pre-historic objects came from below a depth of 8 feet, at which point there was a mixture of peaty matter, underneath which sandy marl was present, implying that the valley must have been more lacustrine at that period. And here the rarer remains were found. All the bones and relics cut from bones were of the ferruginous colour of articles taken from peat. Collectively they strongly resemble relics of the Bronze Period from Swiss Lake-dwellings, save that being found with British and coarse Romano-British pottery they appear to be somewhat later, and may probably be considered late Celtic. They would then have been associated with iron. Many of the bones are so cleanly and artistically cut that it could only have been done with metal tools.

The various rude articles wrought from bones consist of awls or borers, bodkins, a marrow-spoon from a piece of rib, deer antlers sawn through and cut apparently for hafting, wrought sockets of stag's-horn (compare these with similar forms from Swiss Lake-habitations in *Case 3*), a polished greenstone axe, tines from deer antlers, and a bone cut with a chisel end. From the general mass of materials 103 nasal bones (*intermaxillary*) were picked out, which had been looped at one end to form shuttles for netting fishing nets; and with them a number of short lengths of rib-bones of different sizes evidently intended to form the loops or meshes of the nets. They are rudely cut, and some have the appearance of having been used. These tools are unique; and several scientific men who have examined them expressed their belief that the use assigned to them is the correct one.

In *Table-Case 9*, one of the shuttles is attached to a piece of netting, which was made with the implement, in evidence of its applicability. In the same case are fragments of coarse British and Romano-British pottery found at the same depth as the implements.

The following are the animal forms in *Table-Case 9*:—Beaver (*Castor Europæus*); Celtic Ox (*Bos longifrons*); Wild Boar (*Sus scrofa ferox*); but the Marsh Pig appears also to be represented (*Sus scrofa palustris*); Dog (*Canis familiaris*), the variety is long-skulled and powerful, of the Scotch Deer-hound type; Wolf (*Canis lupus*); Fox (*Vulpes vulgaris*); Horse (*Equus caballus*); and there are two hoofs of a small forest horse; Red Deer (*Cervus elaphus*); Fallow Deer (*Cervus dama*): in two instances horns of Fallow Deer are bored: Roe Deer (*Cervus capreolus*); Sheep (*Ovis Sp.*); Goat (*Capra hircus*); Otter (*Lutra vulgaris*); Cat and Badger also are represented, and there are two human lower jaw bones and the posterior half of a human cranium. Some similar forms from the Gas Works occupy *Floor-Case 8*; and in the *Half-Octagon Case No. 2* are some larger forms, notably the huge Fossil Ox (*Urus*), and a fine antler of

Red Deer, in addition to examples of pig, dog, goat, sheep and horse. (For particulars see *Remains found at Reading Gas Works*, Stevens, in *Transactions of British Archaeological Association*, Vol. for 1881).

In reference to some of the rarer specimens, it might be stated that wolves were such a pest in the reign of Edward 1st that a wolf-hunter general was appointed; and all bailiffs were called upon to assist in destroying the animal. The wolf nevertheless lingered on to the time of Henry vii, when it became extinct in England. The beaver has not been resident in England since the time of the first Crusade, when it was hunted in Cardiganshire for its fur. According to Boetius it was killed for its skin in Lockness late in the 15th century. When it inhabited the Berkshire rivers, its habit of blocking the streams with its lodges must have divided the water, and caused swamps, favourable for the formation of peat, but complicated and difficult for navigation.

Pit-Dwellings.

TABLE OF CASE 16, AND 2ND SHELF OF TURRET.

The articles included under the head of Pit-Dwellings were discovered at Hurstbourne Siding, near St. Mary Bourne, Hants, in 1871. A cluster of these early habitations occupied an elevation adjoining the railway station, about 50 feet above the level of the Upper Test river, which runs immediately below. And as the discovery was made at the time the 6in. Ordnance Map was in course of preparation, the site appears on the map. Parts of seven huts were examined, and two were completely explored. They were circular in outline, sunk 5 feet in depth, and entered by sloping passages; and the roofs had most likely been constructed with rude poles, covered and protected with rushes or sods of turf. The relics found in and around them were equally rude, and consisted of flint-flakes, coarse pottery, cut bones, some of which were holed, a sandstone grain-rubber, or quern, and parts of others, stone mullers to use with the querns in the process of pounding or grinding grain; also "pot-boilers," and flattish

blackened flints, which had apparently been employed for constructing earth-ovens for cooking purposes. It might be observed that stones of a similar character have lately been found at Long Wittenham, by Mr. H. J. Hewett, on North field farm occupied by him, where he has investigated an extensive settlement of the Britons. Among other interesting objects taken from the St. Mary Bourne dwellings, were a bone needle, a bone knife, and bodkins of the same material, together with the half of a quartzite hammer holed for hafting. Rude stone implements were present, not merely in the pits, but scattered over the soil adjoining. One of the most remarkable objects was the lip of a cowry, which had been cut from the shell, and used apparently for polishing purposes. In digging out around the pits a British gold coin was discovered, of the type recognised as a degraded form of the gold *Stater* (Greek) of Philip of Macedon. The *Stater* having come into the possession of the Britons in their commerce with the Greeks, the natives probably recognising the advantage of such a medium in conducting their commercial intercourse, had copied the *Stater* after their rude fashion, whence the degradation observable in their imitation of the *obverse* and *reverse* of the Greek prototype. A mealing-stone, and several flint hand-stones from the Pit-Dwellings are present in *Case 3, base of the Middle Division*. Pit-habitations of similar character have been investigated in Wiltshire, Oxfordshire, Somersetshire, Devonshire, Yorkshire, and in other English counties, and also in Wales and Cornwall. They are mostly of the early Celtic period, and may be considered of the same age as the Swiss Lake-dwellings when their inhabitants were bronze users. Mr. Gomme, in his *Village Community*, states that the St. Mary Bourne Pits are Neolithic. (For particulars of the Pit-Dwellings, see *Hist. of St. Mary Bourne*, pp. 25-36).

A model of a group of Pit-Dwellings stands on the marble-topped table in the large window of the Museum. It is a copy of a much larger model in the Salisbury Museum, and represents one of a series of similar groups of habitations discovered some years ago at Highfield, near Salisbury. The dwellings were sunk from 7 to 10 feet in the gravel, and rested on the chalk, and were reached by a shaft, by the means probably of a rude ladder. They were dome-shaped, and constructed of wattles and burnt clay. Each cluster was most likely a communal dwelling, occupied by one

family, there being communication between the several huts, which consisted of three or four in each group. The huts were from 5 to 7 feet in diameter. The relics found in them consisted of coarse pottery, some of which was coloured, and rudely ornamented. Bone combs were present, and bones roughly cut for tools; also a spindle-whorl; a lump of holed chalk, perhaps a loom-weight; a flint arrow-head, and other similar examples. The habitations were considered to be of the Stone Age. They were at all events pre-Roman, and should perhaps be regarded as Early Celtic.

Palæolithic, Neolithic, and Bronze.

WALL-CASE 14.

The Palæolithic and Neolithic series have already received notice in the Catalogue. But the implements selected from the two divisions, and placed in association with the Bronze implements, are intended to show the sequence of the three several periods of Palæolithic, Neolithic, and Bronze, as they are recognised by pre-historic archæologists. They fall into natural groups, and their succession is demonstrable. For example, the implements met with under the rock-shelters of the South of France come nearer to the Neolithic in character than those found in the limestone caves of greater elevation in the same district, and are therefore older (*see Cave-Series*). In the earlier Shell-Mounds, again, the Neolithic implements are ruder and nearer in type to Palæolithic forms than those of the later polished Stone Age (*see Shell-Mound Series*). In the case, two Neolithic implements are exhibited from Cissbury Camp, in Sussex, which are quite Palæolithic in form. They are not necessarily Palæolithic on account of their form, but looking at the two groups in the light of culture stages, the Cissbury specimens show that they insensibly fall into each other.

The older stone implements here shown are from the drifts of the Thames valley at Reading. (*Stevens Coll*) The newer forms, Neolithic, are from St. Mary Bourne, in Hampshire, with the

exception of the well-formed arrow-heads, etc., on cards. These are from Wallingford (*Davies Coll.*) Of the association of Neolithic implements with Bronze during the early Celtic Age there is no question, as will be demonstrated in treating of the Bronze Series.

Bronze Series.

IN THE SAME CASE.

In the Bronze Series will be observed a variety of implements of the Period when Bronze was the chief medium for making weapons, tools, and ornaments. There are long and short swords, which are leaf-shaped, the long rapier-dagger for close quarters, the javelin for throwing, and the heavy spear for thrusting; also various so-called Celts, from *celtis*, a chisel, not on account of their being used by the Celtic people, although in England it was to an early wave of the Celtic race that we are indebted for bronze implements. There is further a bronze socketed sickle, quite a significant implement, as implying that the people of the period cultivated the land and grew corn. The bronze sickle is almost peculiar to Britain, although it is found in the north of France.

Bronze is of great antiquity, and was largely used by the nations of the Old World. The Assyrians were bronze-users, but at an early period they introduced iron. The Egyptians had their Bronze Age, as also had the Greeks and Romans, the Greeks obtaining a good deal of their copper for preparing bronze from Cyprus. The use of bronze extended over a very lengthened period in Egypt, where the cutting instruments of every kind, swords, knives, chisels, and even those employed in their sculpture and other art work were made of that material. The Egyptian copper was of Eastern origin, the mines of Wady Magarah having been worked for copper several thousand years before the Christian era. From the East the art of working in bronze, and the metals copper and tin for smelting it, gradually became known through Western Europe, along the Northern shores of the Mediterranean, ultimately reaching Britain probably through Gaul. In Britain the new

introduction had its infancy, and was of slow growth. The simpler articles such as plain celts and knife-daggers were used first ; these were followed by the addition of sockets, tangs, and flanges to weapons and tools, rendering them easier to haft and more useful. Then came the higher forms, such as palstaves, socketed spear-heads and swords, the whole occupying a lengthened period, and ultimately merging into the Early Iron or Late Celtic Period. Sir John Evans gives a period of something like eight or ten centuries for the Bronze Age in Britain ; and places its commencement at 1,200 to 1,400 years B.C.

Stone, bronze and iron were consecutive in Britain ; but they dovetailed so to speak in their use, stone dropping in with bronze, and bronze with iron. That implements of polished stone were used with bronze we have the fact of finding them with bronze implements in graves of the Bronze Age ; and the plain bronze celts of the earlier period come nearer to resemble those of stone. Examples in illustration of this are seen *in Case 14*. The bronze people of Britain were in a similar stage of civilization to the bronze-users of the Swiss Lake-dwellings, save that the former chiefly inhabited the land. After a like manner they cultivated grain, weaved clothing, used polished stone implements, and tipped their arrows with flint. They constructed rude hand-made vessels of clay, possessed the same forms of domesticated animals, and hunted the red deer, roe, and wild boar.

Bronze is an amalgam of copper and tin, and is most serviceable for weapons and tools when used in the proportions of 90 per cent. of copper to 10 per cent. of tin. It is not only harder, but more fusible than copper. Bronze as an amalgam differs however somewhat largely, according to the uses to which it is applied. Thus, Chinese gongs contain 18 per cent. of tin, to render them more sonorous ; bell metal from 22 to 25 per cent. of tin ; while the ancient mirror or speculum metal contained about 32 per cent. of tin. Copper implements have been sufficiently discovered in some districts to imply that a Copper Age had preceded that of Bronze. In America, the natives around Lake Superior had, from the number of copper implements found, what appears to have been a Copper Period. The implements were not cast in moulds, but were hammered into shapes resembling stone ones. The natives meeting with native copper, and finding it malleable had used it, not knowing

that it was metallic. Such people, although employing metal, would still be considered in their Stone Age. General Pitt-Rivers exhibited a series of plain copper implements at the Meeting of the British Association at Brighton, in 1872. Among the large collection of bronze instruments, probably 1,000, in the Dublin Museum, about 30 have been observed to be of copper. On the whole perhaps it would be better to consider the use of copper for implements somewhat accidental, although there is no doubt copper implements preceded bronze in some parts of the world. A fine specimen of native copper may be seen with the implements in *Case No. 14*.

It is worth noting that bronze held its position for small domestic articles and ornaments after it had ceased to be employed for incisive tools and weapons. Roman relics furnish an illustration of this, in brooches, bracelets, armlets, buckles, styli, needles, bodkins, and hair-pins, most of which are in bronze, and of which the Museum furnishes excellent examples. But it is different with their weapons. The ordinary bronze sword has however been considered Roman by commentators of authority, of whom may be named Mr. Thomas Wright, the author of *The Celt, the Roman and the Saxon*. In view of this there is no doubt that the facts are quite on the side of iron. Thus, 1—Sir John Lubbock states that the bronze sword differs in form from those used by the Roman army. 2—The ornamentation on bronze weapons is not Roman in character. 3—They are never found with Roman remains. 4—Bronze implements occur in countries never occupied by the Romans, as in Scandinavia and Ireland. 5—The Romans used the term *ferrum* as synonymous with a sword.

It has already been stated that the metals used for making bronze originally came from the East, along the North Mediterranean coasts, where bronze had the priority of iron for tools and weapons for cutting purposes. At a later period, however, copper and tin were well-known products of the West of England; and tin was exported from Britain long anterior to the invasion of the Romans. The Romans on their arrival found the Britons using iron. As the native metals became known, and the art of working in bronze developed, implements of various kinds were largely manufactured. Of this there is evidence in the moulds for casting so frequently found with refuse of the smelter's art. The moulds

are of various kinds, and of different materials. Mostly they are single, but occasionally double moulds are found, wrought chiefly in sandstone, burnt-clay, slate, and bronze. In many places in England bronze-founders' hoards have been discovered, consisting for the most part of rough lumps of metal ready for casting, with bronze weapons and tools, fragments of copper, and in one instance tin, for preparing bronze. With these were found broken celts, fragments of swords, imperfect castings, and damaged implements, all waiting the re-advent of the furnace. When prepared, the mode of hafting was by handles fixed at right angles, after the manner of the present axes and hatchets, or quite straight, as in "spuds" or long paddles used for weeding. As the ordinary winged-celt has no complete socket, care was sometimes taken in the selection of a handle to choose a branch with a curved or right-angled end, so that the implement could be secured to it by ligature after the method already explained of fixing the stone hatchets from New Guinea (*see Floor-Case No. 3*). The straight method of hafting celts was in fashion at a very early period, the bas-reliefs in the British Museum from Nimroud showing Assyrian soldiers breaking through the walls of hostile cities with celts fixed in that way. This form of celt is believed to be the ancient *dolabra*; but some hesitation is requisite in accepting such feeble instruments as calculated to break down walls and fill up the earthworks of hostile cities.

Several of the finer implements in *Wall-Case 14* were obtained from the Thames and Kennet, showing that these grand old waterways had been the routes of bronze-using people in penetrating into the interior in early times.

In furnishing a list of the bronze implements, it should be observed that a series of the celts or chisels in the centre of the case are arranged to show developement of form from the plain oval implement, which closely resembles the stone one, to the socketed celt. To arrive at this the tool passed through the winged form to better secure the handle, then through the celt with a stop-ridge to prevent the handle from sinking down on the blade, and onwards through the partly hammered-out socket to the complete socketed celt.

A LIST OF THE BRONZE IMPLEMENTS.

WEAPONS.

A leaf-shaped sword from the Thames, Henley. (*Stevens*).

Ditto, ditto, from the Kennet, Reading. (*Mr. G. Long*).

A rapier-shaped dagger, from the Kennet. (*Mr. F. Albury*).

A heavy spear-head, from Moulshord. (*Mr. W. I. Palmer*).

Two leaf-shaped, socketed spear-heads, one looped, from the Thames. (*purchased*).

A javelin, with socket and loops, from Mortimer West End. (*Mr. R. Benyon*).

A lance-head, with socket and loops, from the Thames, Cookham. (*Stevens*).

Part of a spear-head, Irish. (*Mr. W. L. Nash*).

IMPLEMENTS.

An oval celt, plain, placed with a polished stone implement to show similarity of form. (*Mr. C. Bloomfield*).

Same as the last. (*Davies Coll.*)

A plain celt, from Pamber Forest. (*Mr. Margrett*).

Two plain wedge-shaped celts, from Cholsey. (*Davies Coll.*)

A wedge-shaped celt, with slight flanges, Irish type. (*Davies*).

A flanged celt, from the Kennet. (*Mr. G. Long*).

Ditto, from St. Mary Bourne. (*Stevens*).

IMPLEMENTS—*Continued*.

A flanged celt. (*Cooksey Coll.*)

A flanged palstave, with stopridge. (*Davies*).

Ditto, from Garsington, Oxon. (*Mr. G. R. Turril*).

Ditto. (*purchased*).

Ditto, with stopridge and loop. (*Mr. W. I. Palmer*).

Ditto, ditto. (*purchased*).

Ditto, with stopridge and two loops. (*Mr. G. R. Turril*).

Two celts, with stopridges, and flanges partly hammered over. (*Davies*).

A socketed celt, looped with plain rim. (*Davies*).

Ditto, with lipped rim. (*Mr. Dunlop*).

A small socketed and looped celt. (*Davies*).

Four square celts, with sockets and loops, Gaulish type. (*purchased*).

Two broken celts, a cutting end of celt, a bronze ring and a bead, a twisting ring, and a hammered-out copper tool.

A fine piece of native copper from Mexico. (*Bland Coll.*)

Five stone spindle-whorls, and two stone pendants. (*Davies Coll.*)

AGRICULTURAL IMPLEMENT.

A socketed sickle, from the Thames, Reading. (*Mr. G. Long*).

British or Celtic Interments.

As an introduction to the subject of interments it may be inquired, what is the object of placing remains of the dead in a Museum? It may be replied, not from any sentimentalism or morbid curiosity, but as a question of facts and inferences derivable

therefrom, respecting races who have passed over the face of England, of whom history is practically silent. But finding that they had homes and burial places, and have left their tools, weapons and other objects buried in the soil and scattered over the face of the country, it is desirable, in the interest of science, to glean from the contents of their graves what these men were racially, and from their homes and relics what were their arts and industries, and their social and domestic relations. As ethnological links in the chain of human developement such facts are of great interest to the archæologist and historical student. The history of these early inhabitants of Britain is written in bones, stones, and other rude objects, and will be valuable up to the measure of our power to interpret their remains.

TABLE-CASE No. 8.

Early Celtic Burial, examined by Mr. Charles Cooksey in 1883. The cist containing the remains was found in a chalk cutting 300 yards east of Reading Road bridge, on the south side of the Great Western Railway, at Basingstoke. The skeleton was contracted, on its left side, with the head to the east, and the feet south-west. The grave, a funnel-shaped cist, was 7 feet 9 inches in depth, and 3 feet 2 inches in diameter at its base; and was filled with large flints mixed with mould to the depth of 6 feet; but the bones were covered with 1 foot of chalk-rubble. The relics now in the case consist of the frontal, occipital, and the lower maxilla of a contracted skull. The frontal is thick with prominent supra-orbital ridges, with projecting symphysis of the lower jaw. The objects lying with the dead are of peculiar interest, and consist of two well-wrought barbed flint arrow-heads, and a flint scraper-flake, with a piece of iron pyrites, forming a "strike-a-light." So the dead had here the two chief essentials of his daily life, the weapons to obtain food and the means of obtaining fire to cook it. (*Cooksey Coll., purchased by Mr. W. I. Palmer*).

SQUARE TURRET CASE, No. 22.

On the floor of the Case will be observed three large coarse interment urns of the Early Celtic or Bronze Period, which were taken from a Cemetery on the estate of Sir Nelson Rycroft, at Dummer, Hants, in the Autumn of 1888. The field of the dead joins up to the conspicuous land-mark known as "Dummer Clump"; and the discovery was made by a shepherd in using his iron bar in setting hurdles. It is evidently the burial place of an entire rude community, for during the explorations of a few weeks 16 vessels were removed, including one food vessel; and others yet remain in the ground. They were of three sizes, of clay mingled with flint grit, and were rudely hand-made, and fire-baken, *i.e.*, not burnt in a kiln. Their ornamentation was of the rudest; and they were

all found inverted in the ground, and lying so superficial that their bases were ploughed off. (For full particulars concerning their removal see *Transactions of British Archeological Association* for 1889, *Stevens*). A few chipped flint implements were discovered with the urns, and scattered about the field, some of which are exhibited with the vessels. Of the three specimens *in the Case* it will be observed that two are plain, while the third is rudely indented with pit-marks made with the finger, as the impress of the finger-nail is present; and it has on each side what appears to be an attempt at shaping an imitation handle. The large urn containing the food vessel, and the food vessel, were presented by Sir Nelson Rycroft. When emptied in the Museum its contents were found to be burnt human bones, among which were a small thumb-flint (scraper), a borer, and three flakes. As Dummer is not a great distance from Silchester, it has been suggested that the field might be a cemetery of the Segontiaei, who not merely inhabited *Calleva*, but were scattered over North Hampshire. The ornamented urn in this series belongs to the Stevens Collection; and the smaller specimen was presented by Dr. S. Andrews, of Basingstoke.

CASE 16.—FLOOR OF TURRET.

A British urn of the Celtic Period, of rude hand-made form, with burnt human bones, found in the floor of a stable at Wallingford. (*Davies Coll.*)

Also in Case 16—A small, rude British, hand-made cup, commonly known as an "incense" vessel, a "strike-a-light," a polished, holed stone, probably a charm, and a sandstone rubber, found with a burnt interment, in 1854. The relics were covered by a tumulus, which was carted away in order to cut a water-course through a meadow at Stoke, Hampshire, in the parish of St. Mary Bourne. It was undoubtedly a Celtic burial. (See *History of St. Mary Bourne*, *Stevens*, p. 69, for particulars).

WALL-CASE NO. I.

Middle Division.—A skull (*Brachycephalic*) found with flint implements in a circular (Celtic) tumulus, in Hackwood Park, near Basingstoke. (*Cooksey Coll.*)

A skull (Celtic) double contracted burial, from Basingstoke. (*Cooksey Coll.*)

A small British vessel found at Caversham, Bronze Age. (*Stevens*).

A British pot, from the Thames, Reading. (*purchased*).

A British vessel, from Padworth. (*Mr. Cook*).

CASE 16.

Floor of Turret.—A British urn, found with charred wood, etc., at Furze Platt, near Maidenhead. (*Mr. L. Treacher*).

Fragments of a large burial urn, which were found with ashes and charred remains, in a small encampment near Mortimer, are placed in *Case 3*. They were found by the late Sir Paul Hunter.

WALL-CASE NO. I.

On the two lower shelves, middle division of *Case I*, are arranged a variety of urns, and other vessels of the Bronze Age, from a Cemetery explored three miles north of Muskan, in Silesia. The burial place occupied a platform 500 yards distant from, and above the river Niesse. The whole series was purchased of Mr. Clement, of Yateley Grange, who obtained the vessels by excavations made at the cemetery under his own supervision. A series of pottery from the same interment site was purchased for the British Museum. In an article which appeared in the *Richmond and Twickenham Times*, at the time the pottery was sold in 1879, the opinion is stated of Professor Franks, of the British Museum, that the age of the pottery is not less than 2,500 years; while the late Prof. Rolleston, of Oxford, gives a date for it of not later than the beginning of the Christian Era. But Prof. Virchow, of Berlin, goes back 1,000 years earlier than the first of these dates.

From an account of the discoveries received from Mr. Clement, it appears that the interments occupied a plateau about 60 feet above the river, the soil of which was ferruginous sand of a gritty nature, strewn with boulders, and covered with a dense pine forest. The urns were found at the depth of two or three feet; and the cinerary urn was invariably covered with a kind of saucer. From two to five, and sometimes eight or ten, food and drinking vessels were placed close to the central urn, in an upright position. And in one case as many as 22 vessels of all shapes and sizes were standing around the urn. The central or cinerary urn was in all cases nearly filled with calcined human bones; and in a few instances bronze rings, fibulæ, etc., were mingled with the bones and ashes in the urn. But they were mis-shapen and the metal partly molten, and particles of the metal adhered to the bones, showing that the dead had been incinerated with the ornaments on their persons, and that the trinkets had been partly destroyed by the fire.

The urns were placed in rows radiating from a common circular centre, each set 4 feet distant from the other. The diameter of this circle was 15 feet, and on the east side of it were two parallel rows of stones 5 feet apart and 2 feet under the soil. The stones were slabs of the dimensions of 15 or 20 inches long, with a breadth

of 10 to 12 inches, which stood upright in the soil, and apparently formed the side fencing of a road or path which lead to the circular space which contained the pottery. This roadway was traced for the space of 12 yards.

Urns containing children's bones were surrounded by small vessels, some of which could not have served as domestic utensils, and were probably toys, generally very roughly made, and of coarse clay. The 26 beads now in the Museum were in a child's urn, the age of the child being about ten years, from the character of the bones. They were lying in a row, and evidently had been threaded during life.

In no case were the urns covered with stone slabs or surrounded with stones, but chips of crackled flint lay about, showing the action of fire. One series of vessels was found 18 inches under the surface, and another set immediately beneath them, and one of the upper urns contained a child's bones. The search on this plateau for pre-historic remains resulted from the fact that, on the other or left bank of the river Neisse, Mr. Clement had eight years previously discovered 200 urns, but they were of Germanic type, and of later date.

The urns of this series in the Museum consist of

Five large cinerary urns.	Thirteen toy vessels for children.
Seven medium-sized ditto.	One incense vessel and stand.
Seven basin-shaped vessels, evidently to contain food.	Four bronze articles.
A double urn (a rare form).	A string of child's beads.
Ten small drinking cups, and for other uses.	

Babylonian Relics.

Among the articles from Ancient Babylon for which the Museum is indebted to the late Mr. Bland, some peculiar bricks will be observed in *Wall-Case 1*. They are known as outer or casing-bricks, and are kiln-baked, as distinct from other bricks used by the Babylonians for general building, which were sun-dried. The casing-bricks were constructed of clay, dug from the ditches that surrounded Babylon, in moulds of wood or terra-cotta, and were

impressed with inscriptions in the cuneiform characters. The clay was mingled with chopped straw, reeds, or grass, and after baking impressions of the straw are frequently traceable in the bricks. They differ in size and colour according to the material and baking, and where they are found, many being whitish or approaching yellow, others red like ordinary bricks, while some are black and very hard. This mode of making bricks is of the greatest antiquity, for it is mentioned in *Genesis* that burnt bricks were used in building the foundations of the Tower of Babel, and it is stated that "slime" was used instead of "mortar." The slime according to the Old Scriptures was bitumen, in which they were embedded, and it is not unusual to find this material adhering to the bricks. With reference to the stamped impressions, they appear to differ in size and character, the lines varying from three to seven; and in some instances the inscriptions commence with a figure of a bull, a lion, or apparently an altar. A vast number of the inscriptions, over a large area, appear to bear the name of Nebuchadnezzar. Indeed, Sir H. Rawlinson states, that having examined bricks in over one hundred different towns and cities, in an area of about 100 miles in length and 30 in breadth, comprising Babylonia Proper, he found that all the bricks contained the name of the great Babylonian king. According to the late Dr. Birch of the British Museum, who examined the brick, the name is present on the larger specimen in the Reading series. The date of the bricks is stated as about 604 B.C.

CASING-BRICKS IN WALL-CASE 1, 3RD DIVISION.

There are three inscribed Casing-bricks of different sizes. 1—Large size, 13 inches square, and 3 inches in depth. 2—Second size, length 9 inches, width 7 inches, depth 3 inches. 3—Third size, length 13 inches, width $4\frac{1}{2}$ inches, depth 3 inches. This last is an edge or moulding brick. It might be noted that the same bricks were made by the Assyrians.

With the bricks there is part of a Tablet of polished porphyry, 7 inches in width, and $1\frac{1}{4}$ inches in thickness. It is inscribed on both sides, and the inscriptions appear to have been made with a metal tool.

BABYLONIAN RELICS IN FLOOR-CASE 3.

That the Babylonians made the most remarkable pottery bearing inscriptions the recent discoveries at Niffer or Nippur and Telo testify. The excavations conducted at those places resulted in the

finding great quantities of broken vases, inscribed tablets, and other objects, which have thrown new light on the antiquity and art resources of the inhabitants of Ancient Babylonia.

LIST OF THE RELICS.

Nine mural fragments with portions of inscriptions in the cuneiform or arrow-head characters were most likely obtained with the bricks, and are Babylonian. There are also two pieces of black moulded wall-plaster, and others bearing fresco colouring, two of which are green.

The pottery consists of, 1—part of a vessel with nipple ornamentation and thick green porcelainous glaze in patches; 2—fragments of a thick tray-like vessel with silvered glaze; 3—the base of a small clay vessel; 4—a large piece of grey ware ornamented with circles and a moulding, with apparently a rude imitation of the lotus; 5—a glazed, handled, thick, hand-moulded bottle of light brown ware.

A hard wood bowl, apparently of box, with engraved ornamentation on the exterior, and bearing incised markings round the circumference of its interior. It is stated as Babylonian in the *Bland Collection*.

A small marble figure with powerful Eastern features.

A small, square, terra-cotta cone, holed at the top for suspension, is similar to the perforated cones found in Greece and Italy. It has the appearance of a loom-weight; but it is believed they were worn on the necks of animals, or were stamps, or that they were attached to garments to hold the drapery down.

Wall-Case 1, third division, contains a large roll of the Pentateuch in Hebrew. It is written on goat skins. (*Bland Coll.*)

Egyptian Relics.

The most important Egyptian relic is a Mummy in its special Case, which was purchased for the Museum by the late Mr. W. I. Palmer. It was believed on removing the wrappers to be a dwarf, and therefore rare, if not unique. But the dentition rather points to the fact that it is a child, or a very young person. It is from the Theban District, and most likely from one of the rock tombs of Upper Egypt. The body is rolled in the usual linen bandages of the higher class Egyptians, and has of course been embalmed. Dr. Birch states the practice of embalming as exceedingly early: and probably as existing from about 2,000 B.C. to 700 years after the Christian Era. Mummification appears to have been practised

before the erection of tombs, vestiges of mummies having been found buried in the sand before the Egyptians possessed the necessary tools for excavating sepulchres in rocks. The system existed probably at the time when the Egyptians used stone implements—and stone implements are found in Egypt—from the fact that a sharp Ethiopian stone was used by the priest for making the incision for the extraction of the bowels during the process of embalming, strong evidence that the stone knife was a survival. In embalming, the bowels were removed and washed with palm oil, and after dressing them with aromatics they were returned, and certain spices, myrrh, cassia, and other aromatics were placed with them in the abdomen. The brain also was extracted through the nostrils by means of a curved hook, and the cavity treated with spices after the manner of the bowels. The bowels were then sewn up, and the body anointed with aromatic oils and salted with natron, the whole period occupying seventy days. After this the body was encased in bandages dipped in oil of myrrh, and smeared over with gummy matter, and returned to the friends. There were three modes of embalming according to the price paid for the process. The one just named; a second where cedar-oil was injected into the abdomen without the removal of the bowels, and then thoroughly salting for the period of seventy days. The third method, which was adopted among the poorer classes, was simply salting, and drying, after cleaning, in all cases adopting the period of seventy days. This is merely a skeleton history, as in the higher class interments a round of observances had to be carried out in the preparation of the tombs, the decoration of the dead with amulets, pectoral plates, bugles, sacred emblems and inscriptions, all of which were conducted according to the Egyptian ritual. Some of the coffins were richly painted or embellished, and either kept in the house or placed in a tomb.

On the lower shelf of the Mummy Case rest a mummy infant, and the head and hands of a female mummy, which apparently have been embalmed after the method adopted among the lower class Egyptians. And with them there is a specimen of mummy cloth. These belong to the *Bland Collection*.

In *Table-Case No. 3* are sundry small emblematic figures in bronze, lead, and terra-cotta. They include *Scarabæi*, or sacred beetles; a bronze bull bearing a *palera* on its head (*purchased*); bronze head of a cat with *Scarabæus* (*presented by Rev. A. Cheales*); a hawk and a martin in wood, and two pigs in terra-cotta, from the temple of Sakkara. These are all symbols, the *Scarabæus* being

emblematic of Osiris, the pig an emblem of Typhon, the bull of Apis, the cat of Bast, and the hawk of Horus.

The same Case contains examples of the so-named mummy wheel and mummy bread, also a tear-bottle, which is Roman, and sepulchral figures bearing heads of lioness, ape, and human. And there are small bronze toys of dogs, etc., some of which are believed to be draughtsmen.

A statuette of a female seated with a child, the back of the figure bearing an inscription in hieroglyphics on a tablet.

But the more interesting figures are the *Shab-ti* or *Shab-shab*, five of which are attached to a network of turquoise blue bugles, in the so-called porcelain, for mummy decoration; and with them are fragments of pectoral plates, also for suspension on mummies. And there are 19 *Shab-ti* of larger form, two of which are conspicuous for their size. They are in pale green porcelain, and their manufacture formed a large branch of the Egyptian industry. They were made according to the Egyptian ritual, part of which is stamped on the figures. The figures usually bear a pickaxe, a hoe, and a cord attached to a basket to carry the seed-corn, showing that their office was industrial. It is believed that these figures were intended as aids to the dead in cultivating the ground in the fabled fields of Elysium. (*Bland Coll.*)

An Egyptian coin, and the upper part and head of a small statuette with strong Egyptian features, and characteristic head-dress. (*Mr. M. Eginton*).

Early Greek Pottery.

ON WALL-CASE NO. 9.

During the last half-century an enormous quantity of pottery has been obtained by excavations in Italy, from different localities occupied by early colonists from Greece Proper. The British Museum alone contains not less probably than 1,000 specimens of Ancient Greek art. The vessels are remarkable, not more for their great beauty and variety of form, than for their fine state of preservation, and the rich and varied character of the art they present. In addition, they are a source of knowledge relating to the habits and customs of the Ancient Greeks. To the investigation of the tombs and sepulchral chambers of the Early Greek people Europe is indebted for so valuable an educational series of illustrations of Greek history and mythology.

The *Bland Collection* consists of 19 vessels; and two have since been added (*purchased*). The ornamentation on the vessels is mostly in the usual red on a black ground. The following list includes most of the vases represented.

A *Hydria*, or water-jar, used by the Greek females for carrying water on their heads.

A *Lekythos*, or oil-flask.

A *Kantharos*, or handled cup.

A *Kylix*, a two-handled drinking cup, used at table. Plain and figured forms.

A *Prochous*, for libations, or pouring out oil.

Aryballos, several forms. Vessels with globular bodies and contracted necks; and some have funnel-shaped mouths.

An *Olpe*, for wine or oil.

Amphoræ, for bearing wine or water in daily use. They appear to have been general among the ceramic productions of antiquity.

The *Kylix* is twice represented in *Floor-Case 3*, in forms bearing archaic figures on a fine black ground. One was presented by Mr. Cox, the other *purchased*. The same case contains a small embellished flask of the *Aryballos* type.

A *Kylix*, or rather a *Calix*, for in this case it is Roman, is seen in *Case 15*. It is a handsome decorated two-handled cup, which was dredged from the Thames and purchased for the Museum. The Romans derived the Calix from the Greeks, and used it in common at their carousals.

Eleven handsome antique Greek vases, and a Peruvian water bottle, deposited by Mr. Snare. Ten of the vessels occupy conspicuous sites on the two square *Turret Cases*, the eleventh and the Peruvian bottle are placed in *Turret Case No. 21*. A bone club also forms part of the loan, and a stag's-horn from the peat near Bristol.

Greek Coins.

IN THE GENERAL COIN-TABLE, NO. 2.

Two gold *Staters* of Alexander the Great (336-323 B.C.) (*Bland Coll.*)

Two silver, of Alexander the Great. (One, *Mr. Oakshott*).

Twelve silver coins: two Attica, three Macedonia, one Massilia, one Metapontum, and five Sicilia. (*Mr. W. L. Nash*).

One silver coin of Tyre, and three silver of the Ptolemies, Kings of Egypt.

British Coins.

IN THE SAME CASE.

A gold uninscribed coin, *Obv.* : no design ; *Rev.* : a disjointed horse, facing to the left. (*Mr. Restieaux*).

Ten British, presented by Mr. W. L. Nash, consisting of three silver, Iceni type ; four British tin, one St. James's Park type ; one copper, Channel Isles ; one Nunny type ; and one bearing a human head.

One British, design a Boar. (*Mr. Utley*).

An uninscribed British gold coin found among British remains at the site of a number of Pit-dwellings, near St. Mary Bourne, Hants. It is concavo-convex, and weighs 96 grains. It bears :—*Obverse*, a degraded human head, in which may be traced the outlines of the face, the hair, and a bandlet round the head. *Reverse*, a chariot and horses broken up into pellets and bulbous lines, in which may be traced some resemblance to the head, body, and legs of a horse. The coin is a degraded copy of a Greek *Stater* of Philip II of Macedon. (*Stevens Coll.*)

Romano-British Relics.

TABLE-CASE NO. 3.

Very little was known of objects relating to the Romano-British period in Reading till the introduction of the Museum. Articles of considerable value, and historically of importance, have been found from time to time, notably a number of vessels, including bowls of Samian ware, which were dug up near the Reading Station, when the line was first constructed, but they appear to have attracted but little attention. They formed part of the contents of the Old Museum in Friar Street, and were sold, or rather given away from the prices obtained, and according to the late Dr. Wells were removed to London. Some neat specimens of small vessels of the period have been dredged from the Kennet and Thames, and coins and broken pottery found in digging foundations in various parts of the town ; but the more important discoveries came from the elevation extending along the line of Southampton Street, in which is included the well-known Bob's Mount. The entire hill forms a

considerable watershed between the Kennet and the Loddon. It has been stated that the remains of an old earthwork occupied the hill; and Col. Cooper King found a number of Neolithic flint flakes at Katesgrove, while investigating geological stratifications there, which are now in the Museum. The later discovery of hoards of coins in bottles, and the occasional digging out of Romano-British pottery, bones of animals, some cut for tools, and single specimens of Roman coins, not merely along the crest and slope of the hill, but in the flats southward along the line of the present Whitley and Basingstoke Road, as on the Manor Farm, lead to the view that a considerable settlement must have occupied the district in Romano-British times. As additional evidence, a large *Amphora* was dug out at Katesgrove, which was examined by Mr. Bloomfield, of Reading; it also was removed to London. Col. Cooper King in his short *History of Berkshire*, states that an old map of 1813 shows that a tumulus stood on Bob's Mount. At this moment there are no traces of a trackway; but as outlines of a road are traceable near Twyford, trending in the direction of Katesgrove, it is likely that it is part of a *vicinal* or branch way from the Cuneio-Spinæ road, which, coming from the direction of Bucklebury Common, crossed the Kennet at Katesgrove. Further, as there must have been a settlement, it follows that there were roads leading to farms (*Agrariæ*), and by-ways (*Devicæ*) to outlying villages. The elevation furnishes wide views of the Thames and Kennet valleys. Covered by the Thames on the north, by the Loddon on the east and south, and protected by the Kennet on the west, there is room for the suggestion that it was the earliest position taken up by the Neolithic and Celtic peoples. And as the Romans in the conquest of Britain usually followed the same lines, it is evident that it subsequently became a Romano-British settlement. Some of the earlier antiquaries held that Reading was *Calleva* of the Itineraries. Dr. Beeke, at one time Professor of Modern History at Oxford, read a paper before the Society of Antiquaries, in 1804, "On Roman Roads in and near Berkshire," in which he placed Calleva at Reading. And the Rev. Thomas Reynolds, in a work on the Antonine Itinerary, in 1799, also places Calleva at Reading. Mr. Reynolds unfortunately leans too implicitly on Richard of Cirencester, whose writings are condemned by modern antiquaries. But there is very little basis for these views. The remains discovered,

although interesting, are not sufficiently important in the face of the very fine relics found at Silchester. No great centralisation in the shape of walls or earthworks are present as at Silchester; and we have the authority of Mr. Charles Roach Smith, that the Stations beginning and ending *Itinera* were *walled* towns.

The coins already referred to as found in bottles consist of two discoveries. The first made in Milman Road, in February, 1895: the second in Swainston Road, on December 11th, 1895. As the whole of the coins are listed, and described *in the Case* (No. 3, 1st division), it will not be necessary to give more than a list of the Emperors represented.

No. 1.—A small rude cup containing about 50, of which 11 were secured with the vessel. All silver (*Denarii*).

Three of Julianus (two of same type).

One of Valentinianus.

Two of Valens (same type).

Two of Gratianus (same type).

One of Magnus Maximus.

One of Arcadius.

One undecipherable.

Single Roman coins have occasionally been brought to the Museum from the same locality, and they are usually of the period of the Constantines.

No. 2.—A small, squatted cup, known as a "thumb-pot," glazed, of New Forest ware. About 120 coins have been traced, of which 50 with the vessel are in the Museum. One is of gold (*Aureus*), the others of silver (*Denarii*).

One of Valentinianus ii (gold).

Four of Constantius ii (323-361).

Seven of Julianus (355-363).

Seven of Valentinianus Senr. (364-375).

Four of Valens (364-378).

Four of Valentinianus Junr. (375-392).

Four of Gratianus (375-383).

Five of Theodosius (379-395).

Four of Magnus Maximus (383-388).

One of Victor (son of Maximus).

Three of Eugenius (392-394).

Four of Arcadius (383-408).

Two of Honorius (393-423).

As the coins in both bottles belong to the later Empire it would appear to imply that they were buried about the time of the Roman evacuation of Britain, for Zosimus informs us that the Britons having successfully repulsed an early attack of the Saxons, Honorius in 410 sent letters to the cities of Britain exhorting them to provide for their own safety.

With regard to the pottery usually found at Romano-British sites, Oxfordshire, Dorsetshire, Staffordshire, and Somersetshire might be named as counties where Roman Kilns have been found. But the

more marked evidences of the potter's industry are present in the New Forest of Hampshire, and at Upchurch, in Kent. At the latter place vast quantities of a dark coloured ware have been from time to time unearthed along the banks of the Medway. The vessels for the most part consist of plain urns, basins, saucers and other ordinary utensils, mostly of a darkish colour, almost black, the colour being attributed to smothering the kilns while the pottery was being baked. The pent-up carbonaceous matter of the fuel coming in contact with the iron of the clay caused the vessels to assume the dark hue of imperfect oxidation. The New Forest ware is more varied in character and decoration. Much of it is severely fired, of a maroon colour, glazed, and in some cases indented at the sides, as if the thumb had been pressed on the clay while it was moist. The vessels in consequence have been termed "thumb-pots." The commoner forms of ornament are circles, and radiating stripes, laid on as a ferruginous paint before the final baking. The Castor pottery is not merely thinner, and better moulded, but finer from the character of the clay used in its construction. The ornamentation is more varied, and better executed. Many of the finer black pieces have scroll patterns in whitish slip; and their embossed pottery, showing animal designs and hunting scenes, is very suggestive. The beautiful crimson lustrous ware termed "Samian" is not unknown in Reading, although met with sparingly. It is Roman, and was manufactured largely in Italy for exportation to Britain. The more ancient of this fine material from Samos appears not to have been introduced into Britain during the Roman occupation.

The Romano-British remains, in *Case 3*, found on the Manor farm, refer to settled agricultural industry. The pottery is coarse and useful, in red, grey, white and black ware; and there are fragments of a large urn, in which the clay contains siliceous grit. There are also a few rude tesserae, part of a mortarium, and a whetstone. From the same site was obtained a heavy under-stone of a quern for grinding corn, of "pudding-stone," a well-known material used for that purpose. It is composed of sand, pebbles, etc., united by a siliceous cement. A testimony to clothing industry is a heavy loom-weight, with a hole at the top for the reception of a suspension thread, to carry the cross-thread in weaving. A visit to the site in 1887 resulted in the finding of some pottery, flint-flakes, and scraps of roof-tiles, but there were no surface traces of a building. Teeth of the small Roman Ox were found: and *Wall-Case 1* contains a large portion of a bottle of white ware from Manor farm.

In the same Case, No. 3, are a few relics from Mr. G. Palmer, obtained from a building on his estate at Eling, in this County. The articles consist of a small vase of Durobrivian ware, a glass lachrymatory, a terra-cotta lachrymatory, and four small bronzes, one being the figure of a dog. The building was partly explored a few years ago, and was found to cover an area of 75 feet by 45 feet. It contained a mosaic pavement, which had been injured by the steam plough; but from what remained it appeared to have contained panels with an octagon border, the border being a twisted guilloche in red, white, and blue mosaics, with an outer border of plain red cubes. Roofing, and flue-tiles, and pieces of stucco of red tint, were present, and the usual accompaniment of oyster shells and animal bones. At about 150 yards from this building another was found of a plainer character. It had no tessellation, and occupied three sides of a square, so that it must have had a courtyard. The entrance appeared to be on the south; and among the objects discovered were nails, staples, holdfasts, broken mortaria, and a brass coin of Constantine.

In the same Case 3 may be seen a variety of Romano-British objects from different districts—three terra-cotta lamps from Wallingford (*Davies Coll.*); four lamps and a *patera* from St. Mary Bourne (*purchased*); two lamps (*Mr. Eggington*); a lamp (*Mr. Cox*); a terra-cotta lamp (*Mr. Cordery*); two vases from the Thames (*Mr. G. Long*); a thick stone vase (*Davies Coll.*); and a bottle and “thumb-pot” of New Forest ware, found at Theale, and presented by the late Mr. Harrinson.

In the small Window-Case No. 15 are five Romano-British vessels dredged from the Thames; and a holed clay loom-weight of similar character to those found in Swiss Lake-dwellings. These were purchased; and the same Case contains three terra-cotta lamps and a lachrymatory from the Catacombs at St. Callisto, presented by Miss Travers.

In Wall-Case 12 will be seen Mr. W. L. Nash’s donation of objects discovered in making excavations in the City (Roman London) in 1881. It includes iron styli, knives, one a girdle-knife, a key, tweezers, and ornaments, bone needles, pins, ear-picks, and fragments of chain, an arrow-head, knitting-needles, bodkins, a fibula, and an armilla. Some of these are in bronze, others in bone and iron. There is also a small bronze bell. The most interesting of the series consist of some relics from the Collection of the late Mr. C. Roach Smith, among which will be noticed a bronze *Simpulum*, a ladle used at the sacrifice to dip wine out of the *Crater*, or other deep vessel, in order to make libations. There is also a bronze *Strigil*, a kind of hook for scraping off the drops of moisture and impurities from the skin after the heat of a vapour bath. Another remarkable type is a bronze *Fibula*, of four spirals (a Gallie form); also a fibula with a wheel ornament, and a bronze steelyard weight.

Wall-Case No. 12, continued. Among the late Mr. Davies’s valuable contributions, a series of Romano-British relics from Wallingford and other localities occupy this Case. They include 14 bronze *Fibulae*, various, one bearing the character of a Gallie form; two *Armillae*, one penannular (Gallie type); three bronze statuettes; six cabinet keys, bronze; pins, a bell, an iron key, and a circular *fibula*. *Wall-Case No. 13* contains a flanged iron hatchet, similar to a

specimen found at Silchester. *Wall-Case 12* also contains iron scissors, a bronze spoon, and a padlock bolt, part of a collection purchased of Mr. C. Cooksey by Mr. W. I. Palmer. There are further, an iron knife and a bronze pin from Silchester. (*Mr. G. Long*).

In Table-Case No. 3. Romano-British pottery, and an iron knife, found at Ruscombe, Berks, from Mr. L. Treacher. *Wall-Case No. 1*, lower shelf, contains a small red vase with dotted ornamentation, found at Abingdon; and a long-necked *Ampulla*, in red glaze, from Wittenham. (*Stevens*).

In Floor-Case 3 are sundry articles belonging to the *Bland Collection*, from Herculaneum. They include seven large terra-cotta lamps with handles, and two small hand-lamps without loops; various pieces of wall-plaster showing paintings in fresco, similar to the mural designs from Silchester; a black, glazed, salt-cellar (*Salinum*); some loose tesserae, and fragments of mosaics. Also portions of terra-cotta figures, and six lachrymatories. The city of Herculaneum, in Campania, was destroyed during an eruption of Vesuvius, on August 24th, A.D. 79, in the reign of Titus. After an interment of 1,600 years, it was discovered in 1713, at the depth of about 24 feet. The discoveries made during the explorations are of great historical and scientific value.

Central Case 16, 2nd tier of Turret, contains a Collection of Romano-British remains discovered in a building at Finkley, Hants, in 1872. A plan of the building appears on the 6-inch Ordnance Map, which was being prepared at the time the building was opened. The site was many years since selected by Sir Richard Colt Hoare, the Wiltshire historian, and by the late Mr. Charles Roach Smith as that of the missing station, *Vindomis*, of Antonines *15 Iter*, between *Calleva* (Silchester) and *Sorbiadunum* (Old Sarum). Full particulars of the discovery appear in *Stevens's History of St. Mary Bourne*. The articles from the building, in the Museum, are chiefly in iron, such as arrow-heads, bronze ornaments, including rings and fibulae, and some coins. The more interesting remains are small tools and fragments of iron used in the construction of arrow-heads. These were sifted from a quantity of ashes in a room believed to have been used as a workshop. From the same district there are two specimens of tessellation, the one a fragment found in the Acre, Andover; the other a piece of mosaic from Bramdean, Hants.

On Wall-Case 5, two lower quern-stones rest against the wall, one of which was found by the Rev. C. Kerry in the garden of the Queen's Hotel, and the other came from Swallowfield. Both appear to be Roman, and their material is hard vesicular lava, called Andernach stone, from Andernach on the Rhine. Their bases are grooved in radiating lines for grinding, after the manner of modern millstones. The quarry from which the stone is obtained is near Andernach, and is 60 feet under ground; and the stone has the reputation of having been worked for a long period by the Romans for material for their quern-stones.

Roman Coins.

COIN-TABLE NO. I.

As the inscriptions *Obverse* and *Reverse* are fully given in the Case, it will not be necessary to do more than group the coins here.

A collection of 136 coins, consisting of one gold (*Aureus*), and 135 in silver (*Denarii*), and five in second and third brass. Dating from *Tiberius* (A.D. 14-37) to Constantine the Great (A.D. 306-337). (*Bland Coll.*)

A collection of 27 silver coins, of which 26 are *Denarii* and one a *Quinarius*. The remainder consist of four first brass, three second brass, and 31 third brass. (*Purchased, and from occasional contributors*). Twelve of the *Denarii* (*Stevens Coll.*)

From the late Mr. W. R. Davies. 131 coins, consisting of 22 silver (*Denarii*), 24 first brass, and 85 third brass and *Minimi*, dating from *Tiberius* (A.D. 14-37) to *Honorius* (A.D. 393-423).

A silver coin (*Obv. Pansa*) of the *Vibia Gens*, a plebeian family. (*Mr. Goddard*). A silver coin (*Obv. Gem*) of the *Aburia Gens*, a plebeian family. (*Mr. Oakshott*).

In the same Case. An antique gem, in a modern gold setting, engraved with *Hercules bibax*, and the initials of the owner. It was formerly in the Meyer Collection; and no doubt was the *Signet* of a Roman ring. (From *Mr. Arthur J. Evans*, of the Ashmolean Museum). Also an antique gem-ring, with Roman design. (*Mr. W. R. Davies*).

Romano-British Interments.

The following Interments are placed under the head of Romano-British on account of the pottery being wheel-turned, finer, and more artistic than the Celtic. It is consequently later. Some of the coarser forms of Romano-British ware found in burial places might appertain to native Britons; but the more finished character of the vessels shows that the potters had been sufficiently in contact with Roman art to have felt its influence.

IN CASE 16, FLOOR OF TURRET.

A fine dark funereal urn, containing incinerated human bones, found at Wokingham in 1886, and deposited by the Rev. E. Sturges. It was discovered near the Palmer Schools, in a gravelly soil; and as broken pottery of similar character was dug up during the same operations, the inference is that there was a small Romano-British settlement at Wokingham, and that this was their place of interment.

IN THE SAME CASE.

A Romano-British cinerary urn, containing burnt human bones. Also two broken urns, presented by Mr. Hewett, of Wittenham. They were found in North Field, in 1895, in cutting a trench across a corner of a square enclosure, and are evidently associated with the remarkable discoveries Mr. Hewett has been conducting at Long Wittenham, in settlements first occupied by Britons, and subsequently by Romano-Britons.

IN WALL-CASE 1, THE MIDDLE DIVISION.

A Romano-British Amphora, found with burnt bones and ashes, at Wallingford. (*Stevens Coll.*)

 South Fawley Interments.

CASE 16, FLOOR OF TURRET.

Two interesting Romano-British relics have recently been received at the Museum from Mr. Philip Wroughton, of Woolley Park. And they are an important addition to the Museum from the fact that they were found in the county. They consist of two small vessels—the one a neatly shaped bottle (*Ampulla*) with a rimmed lip and narrow foot, $4\frac{1}{2}$ inches in height and $3\frac{1}{4}$ inches in diameter, of the hard-baked maroon glazed ware, so characteristic of much of the pottery from the kilns of the New Forest; the other is a more highly embellished cup (*Poculum*) of coarsely-glazed reddish terra-cotta, $4\frac{1}{2}$ inches in height and $3\frac{3}{4}$ inches in diameter, ornamented with dotted scroll, and on the whole very similar to “Durobrivian” ware. But from the coarser character of the material of the vessel and its ornamentation, and from its resemblance to the scroll-pottery from the New Forest so frequently found at Silchester, it is likely that both vessels came from the New Forest. It appears that four skeletons were discovered in four distinct graves, on a hill between North and South Fawley, in 1883. The graves were about 3 feet from each other, and were 6 feet in length, 2 feet in width, and 2 feet 6 inches in depth. The skeletons were lying on their backs in the direction of north and south. The bottle was found in an inverted position between the right shoulder and the head of one of the dead, and the cup occupied a similar position in another interment. These small funereal vessels are mostly found in

proximity to the right shoulder, evidently to be within easy reach of the right hand. They are commonly understood to have contained food, and are called "food-vessels," but the quantity must have been insignificant; and if they contained food it was probably that most esteemed by the occupant of the grave during life. It is, however, worth the suggestion that some of these vessels were symbolical, and did not actually contain food.

IN CASE 16, FLOOR OF TURRET.

A *Cranium* and an arm-bone, with a Romano-British bottle and a drinking cup, dug up in the Old Abbey grounds, at Abingdon, the bottle on the right and the cup on the left of the skull. (*Stevens*).

IN CASE 3, MIDDLE DIVISION.

A *Cranium* (Celtic), with bronze tweezers, and Romano-British pottery, from Gloucestershire. (*Mr. C. Cooksey*).

A skull (in the same division) with large coffin nails. The coffin of three slabs was found with a small cup on the side of the Roman road (from *Londinium*), at Highfield, near Winchester. (*Mr. C. Cooksey*).

IN CASE 16, FLOOR OF TURRET.

A bottle (*Ampulla*) with a frilled neck, and various broken Romano-British pottery, with ashes and burnt bone, taken from a cist in the chalk, at Finkley, Hants, in 1871. The cist was 6 feet in length, 5 feet in depth, and was covered with sandstone slabs. Above the slabs were fragments of bricks and tiles, a few pieces of Romano-British pottery, and fractured bones of animals, apparently thrown in to fill the grave (see *History of St. Mary Bourne*, p. 70). The peculiarities in this interment were that the grave was found within the precincts of a Romano-British building, and that the cist was a distinct pan hollowed in the solid chalk, with a small platform of 2 feet square alongside of it, apparently made for the person to stand on while depositing the remains.

British pottery (*in Floor-Case 3*) taken from two cists containing urn-burials, at Basingstoke. The cists were found by Mr. C. Cooksey, on a hill north of Basingstoke, immediately above the Loddon, and were cut in the chalk to the depth of 1½ feet, with 2 feet of earth lying above them. They were in shape square, and the urns, which were all broken, occupied the corners, and were in some instances covered with stones. Signs of burning were present in the shape of wood ashes mingled with the earth, and the flints were crackled. Some flint-flakes and scrapers were discovered mingled with the soil, together with bones of the Celtic ox, pig, dog, and goat or sheep. The more perfect portions of the remains were removed to the Reading Museum. The date of the explorations is April, 1882. (*Mr. C. Cooksey and Stevens*).

Portions of a Romano-British skull and bones of a female (*in Floor-Case 16*), dug up at Cruxeaston, Hants, near Newbury, in 1856. A thumb-pot of the same period was found with the remains. There is nothing remarkable in the interment save that the right thigh-bone had been *necrosed* during life, and that fracture had in consequence existed at the time of death. (*Stevens Coll.*)

STANDING ON WALL-CASE 5.

A handsome urn, bearing a Roman inscription, was obtained for the Museum, but its source is quite unknown. It was observed doing duty as a flower pot in front of an old cottage at Earley. It is of white marble, and carried a lid, which is absent, but which was fixed to the urn in three holes with lead rivets. It has been thought likely that it is a foreign production, introduced perhaps from Italy by some collector of curiosities. But there appears nothing antagonistic to its being British. It belongs to the pagan Roman period, and numerous Roman memorial stones, bearing inscriptions to the dead, have been found in this country. The tablet is neatly carved, and bears the following inscription :—

D M
C TREBIMAR
 CIONIS

Meaning :—

D (IIS) M (ANIBVS)
C (AIVS) TREBI (VS) MARCIONIS
To the Gods of the Shades
To (the Memory of) Caius Trebius
Marcion.

The Saxons.

WALL-CASE NO. II.

As in the races already reviewed, our knowledge of much of the Saxon industries and arts is derived from their graves. But their burial places and their contents differ somewhat according to the people who inhabited the various districts. Their burial places might be classified under the heads of barrows or tumuli, and cemeteries; and the dead were interred by incineration and inhumation, sometimes both occurring in the same place of interment. The grave-mounds as a rule are smaller than those of preceding races, and are often on conspicuous elevations. In Kent, Sussex, and the Isle of Wight, for instance, tumuli are found in small groups on the downs; while in Derbyshire, Oxfordshire, Gloucestershire and Berkshire cemeteries prevail. Wherever found they are mostly

rich in relics, and may be considered in their teaching as store-houses of the habits and customs of our Saxon forefathers. The males were frequently buried with weapons, the warrior being placed in the grave on his back, the spear on the right, the sword on the left, the *seax* or knife also on the left, and the shield on the centre of the body. With the females were buried trinkets and ornaments, and sometimes useful household articles. Of the former may be named beads, bracelets, brooches, finger rings, chatelaines, combs, pins, needles, bread boxes, and many other similar things. With the males swords, spears, knives, shields, buckles, brooches, buckets, tumblers, querns, draughtsmen; indeed most objects that appertained to the daily wants of men. When secular objects are present in graves they are an indication that the interments are pagan. In the earlier period of Christianity pagan and Christian burials sometimes are found in the same cemetery. An example of this was met with in explorations conducted at a cemetery at Harnham in Wiltshire; and Frilford in Berkshire furnished another illustration.

RELICS IN WALL-CASE II.

An iron spear-head, a knife, and two gilt saucer-shaped fibulæ, found in an Anglo-Saxon grave near Dorchester, Oxon. (*Presented by Mrs. May*). It should be remarked that saucer-shaped brooches are not usually met with outside of the counties of Berkshire, Oxfordshire and Gloucestershire.

From the Taplow tumulus, which was explored in 1883. A few relics are placed on a card, viz., fibres of gold thread, and a small piece of braid made from the thread, which probably formed the edging of the tunic of the occupant of the grave. Also a fragment of a bronze bucket, showing the peculiar horse-shoe designs, and a bone or ivory draughtsman. *The square Turret Case, No. 22*, contains a glass model, made by Messrs. Powell, London, of the remarkable tumbler with side ornaments found in the grave. (*Stevens*).

The chief remains in *Case II* are a large two-edged iron sword, two iron spears, an iron *seax* or knife, an iron dagger, two large iron centre bosses of shields, and a bronze ring, dug up with six skeletons, at about half a mile from, and north of, Cookham Station, and at the same distance from the Thames. The bodies lay side by side with their heads southwards. (*Purchased of Mr. Child, in 1883*).

Wall-Case II also contains the following miscellaneous articles. Two iron spearheads, an iron axe, and an iron knife, found in the Kennet, from Mr. A. Palmer. A winged spearhead, rare, found with a bronze sword at Henley-on-Thames; and a spearhead from St. Mary Bourne: (*Stevens Coll.*). An iron spearhead from the Thames, from Mr. W. L. Nash. An iron spearhead and a bolt from the Thames, from Mr. G. W. Smith. An iron spearhead with remains of

the wood shaft, from Mr. Utley. A spearhead from the Thames. (*Mr. Howlett*). A spear from the Thames, Mr. F. W. Albury. A spearhead from the Thames. (*purchased*). A spear with remains of the shaft. (*purchased*). A Merovingian bit from the Thames. (*purchased*) A bronze penannular armilla. (*Davies Coll.*) Boss nails and a bronze ring. (*Cooksey Coll., purchased by Mr. W. I. Palmer*).

Table-Case 1 contains relics from a Saxon interment found in the Coral Rag, on sand, in a cist 6 feet by 6 feet in dimensions, and 6 feet in depth, at Vastern, near Wootton Bassett. With the bones was found part of a large ornamented amber bead. (*Mr. C. Cooksey*).

In Floor-Case No. 15. A lead bulla or seal (Saxon?) bearing, for design, horse shoes in the form of a Greek cross, dug up at Wargrave Hill (from *Mrs. Climenson*).

Wall-Case 1, centre of middle division, contains a series of Saxon remains, deposited by Mr. G. W. Smith, and collected by him. They were found at the time the railway was widened in 1891, the site being evidently part of a Saxon Cemetery of the pagan period. It occupies a low elevation along the valley above the Thames, at a short distance eastward of the Earley brick-kiln. Both incinerated and inhumed interments were discovered, the latter lying with their heads to the east, and some of the bodies were contracted. The relics are all labelled, but it may be stated generally that with the dead in some instances were found food vessels; and with the males, spears, knives, buckles, etc.; with the females, beads of the usual colored pastes, amber, and glass, spiral finger rings, part of a comb, buckles, a plain spring bracelet of Roman type, a spindle, circular bronze brooches of various designs, two being of bronze foil gilded; and iron rings, which might have represented money. The hilt portion of a Saxon sword was dug out in moving the soil. The pottery is of the usual plain and ornamented kinds, the ornamentation being in stars and zigzag lines. The designs on some of the pots are similar to those on vessels removed by the late Professor Rolleston from the Saxon Cemetery at Frilford, in the same county, a few years since. (For particulars see a paper in the Vol. for 1894, *Transactions of British Archaeological Association, Stevens*).

The same shelf contains a cranium and beads of similar character to those just described, which were discovered at East Shefford, and placed in the Museum by Mr. Baylis, of Wyfield Manor. The skull is that of a female, and the beads are of the usual coloured clays, and undoubtedly Saxon.

There is also a fine Saxon urn, with a bone comb, which was found inside of it, which was dug up at Brixworth, Northamptonshire, on a farm belonging to Lord

Wantage. Other urns, and some glass vessels were found at the same site. The relic is the donation of Mr. R. Attenborough.

The same division contains a cranium and a buckle found in cutting a road, at St. Mary Bourne, Hants. (*Stevens*).

In the same Wall-Case, middle of first division, a number of *Crania* are exhibited, with antique relics, which were discovered in an ancient burial-place, during building operations, in a small field adjoining the King's road immediately opposite the "Jack-of-both-sides" Inn. The human remains are of two types, the one found occupying the lower levels, the other the upper, the former having the appearance of being Celtic, the latter coming closer to the Saxon type. The occupants of the lower graves were mostly oriented after the Christian mode, and in some cases coffins had been used, or boards nailed together, as nails were found in the graves; while the more superficial burials were in various directions, and in some instances were accompanied with relics not consistent with Christian usages. The foundation of a small building was laid bare, which bore the character of an early church. Some of the building materials are in the Museum. The discovery was made in 1890. (For particulars see *Berks, Bucks and Oxon Archaeological Journal* of January, 1896, *Stevens*).

The following is a List of the Relics:—

1—A rude pewter coffin-plate, found with a male interment, on which three crosses are sharply incised.

2—The upper-stone of a small quern, found by the side of an aged female.

3—An antique pewter Chalice, found on the hand of a male lying with the head to the west.

4—A bronze brooch-buckle of Saxon type, taken from a tomb 6 feet in length and 3 feet in breadth, built with coarse tiles.

5—A erueiform pendant of pewter, with a male interment.

6—A pewter *fibula*, erueiform, of Saxon type, found with bones.

7—A remarkable relie of gold and purple glass, thought to be an amulet, found with mingled bones.

8—An exactly similar glass relie, also lying with bones.

9—A female skeleton with two half-cirele plates of copper surrounding an arm-bone. The plates contained ivy leaves, which had been applied as a dressing to disease (*Necrosis*) of the bone.

Other graves contained an iron knife, a bone draughtsman, and an iron domestic implement. Sundry articles of various dates, including Romano-British and Saxon pottery, were found in the soil of the graveyard. (*Stevens Coll.*)



THE MEDIÆVAL DIVISION.

Old Reading Pottery.

TURRET-CASE NO. 22.

It has already been stated that semi-civilized men had learned the plastic nature of clay, and had shaped coarse pottery with the hand, which they baked in an open fire, but it was available for only a few purposes, and would not withstand fire. The Assyrians, the Babylonians and the Egyptians had arrived at more cultivated methods; while the Greeks, in their richly embellished funereal vases, and the Romans, in their Samian, porcelain, and enamels, of which beautiful examples are present in the Museum from Silchester, had attained to a high position in the plastic arts. The Egyptians had acquired sufficient knowledge of porcelain to cover their small figures with glaze or porcelain, but the interior of the objects was cemented together with melted matter, and not completely molten, and were of but little value. The Chinese were the first to manufacture porcelain, which was wrought by them as early as 163 B.C., and for centuries it was the only porcelain known in Europe. The distinction between pottery and porcelain consists in the former being opaque and the latter translucent. The first porcelain was known as *frit*, a material melted or fritted together by great heat, to form chemically what is naturally present in porcelain clays.

True porcelain was made in 1709, in Dresden; and Germany was early in the manufacture of this fine material. In England, the Chelsea manufactory may be considered as established at about the middle of the 18th century. Although no royal subsidies

helped the English manufacturers, they produced wares of great excellence, Chelsea having in its best days made beautiful specimens in blue and claret colours, and executed paintings on vases of great delicacy and beauty. The Chelsea works were subsequently removed to Derby, where the manufactures were continued successfully to a late period. At Worcester also porcelain was wrought of a highly decorative character, and here the introduction was made of transfer printing on china, by which labour was saved, at the expense probably of some originality of design. This delicate process was first introduced at Battersea about 1750, where good work was produced; and the discoveries became of considerable commercial value in setting up an export trade.

But a word should be reserved for the magnificent porcelain of Sèvres, which may be considered as unequalled. Like much similar work, it appears to have reached its greatest excellence soon after its introduction, for there is no doubt that for beauty and richness the finer productions appertain to a period between 1753 and 1769. This was due undoubtedly to the fine soft material so readily absorbing the rich pigments discovered by the French chemists of that time. The work, however, was chiefly experimental, and prepared the way for the discovery of the hard paste such as the Oriental, which was considered as the only true porcelain. This was found after considerable trial and experiment not so well suited to take the rich colouring, so that the earlier Sèvres fabrics still remained as the more valued. Rich and brilliant in colouring as are the Sèvres productions, it must be conceded that in beauty of form they do not reach the contemporary works of Wedgwood. The English are fully justified in their pride in the classical and beautiful designs of Wedgwood, which have acquired such a reputation among collectors that everything bearing the name is eagerly purchased.

But the pottery to be dealt with in the Museum has little to do with porcelain, but rather with an earlier, as an English production, and much coarser ware manufactured in Reading. Ungainly although it may be, it cannot be considered common, for it is rare to find, as at Reading, six old English pitchers in one collection. It certainly has no pretensions to beauty, but it served its purpose at a time when earthenware of any kind was hardly obtainable. The first introductions of the kind in England were potted at about the end

of the 13th century, and consisted of pitchers and jugs, with a few cups, dishes, plates, and Old English costrels. The word "few" is used advisedly, for at that time even the wealthy used pewter dishes and wooden trenchers at their tables, and mazers of wood for drinking cups. In reference to the usage, we find, in Shakespeare, even Caliban rejoicing that he should scrape trenchers for Prospero no longer. As late as 1633, Mr. Pepys, who was remarkable for his politeness, records that on dining at the Lord Mayor's feast, it was "unpleasing" to him to see the meat served in wooden dishes, and to be allowed no napkins or change of trenchers. The costly wares then used by the nobility came from Italy and Flanders. In proof of the form of pottery employed in the Middle Ages may be stated an entry of 8s. 6d. paid to Juliana the potter for 300 pitchers by the Executors of Queen Eleanor, wife of Edward I. Earthen vessels are also mentioned in the regulations for the household of Edward IV (1461-1483). In the household book of the Earl of Northumberland (1512) there are directions to purchase leather vessels instead of earthenware. Again, in the regulations for Royal Households, published by the Society of Antiquaries in 1790, page 78, Office of Pitcher House, "the chief yeoman of this office hath in charge, under the Sarjeant of Sellar the keepinge of all the pottes and cuppes of silver and leather tankards and earth asshen cuppes, etc." Even in the time of Queen Elizabeth the table appears to have been of the plainest, as in 1592 the daily and ordinary service consisted of trenchers and white wooden cups, which were served to the Queen and her officers, as appears from the inventory of "expenses of bottles, jugs, etc., for the Queen's drink." Pewter services continued to be used down to the beginning of the 19th century.

In reference to the Old Reading pottery, which is considered as having been wrought at about the end of the 13th century, it appears from the Reading historians (see *Man's History*, p. 347), that the first Charter to the Guild Merchants of Reading was granted by the Crown in 1252, the 37th of Henry III; and as the Mercer's Company was one of the Guilds, in which were incorporated two *potuaries* or "earthenwaremen," the date of the Charter appears to show that the pottery making was carried on at the date assigned to it. At that period there were no large potteries in England, every community of any importance having to depend on its own

industry; but as the various industries, under the head of Guilds, were conducted with jealous and restricted rules, improvements were but slowly introduced, and thus the potter's art remained somewhat stationary over a lengthened period. That pottery-making was quite local is further shown by the fact that the same kind of pottery is found at Basingstoke, in a part of the town known as Potter's Lane. In this early ware the paste is coarse, the potting imperfect, and the burning incomplete. The ornamentation, when the vessels are not plain, is rude, and consists of strips and dots of clay, or tooth-like scraps laid on in irregular lines. To these should be added indentations, and thumb-impressions carried round the bases of the vessels. In corresponding coarse fashion the glaze was a dull green, or sometimes yellowish green, occasionally blotched with black, not always uniformly spread over the surface of the vessels. The glaze was silicate of lead, and its application extended to a greater or less extent down to the end of the 16th century. It was thickly applied, and one object of its use evidently was to render the pottery more capable of containing fluids. The same coarse forms were produced during the 14th and 15th centuries; but the later pottery was moulded with stronger clays, and better baked; and in some cases the vessels had a brown ferruginous glaze. In the 16th century the green glaze still prevailed, but the forms became more numerous, and embraced jugs, pots, salt-cellars, costrels, strainers, dishes, basins, pipkins, "money-pigs," and other necessary articles. To this period of the potter's art the crockery belongs, which so constantly turns up in moving old foundations in Reading. In Minster Street, Broad Street, the Butts, West Street, Cross Street, the Market Place, Friar Street, and Blagrove Street, in short, in all the early centres of the town these crocks have been dug out, showing they were then in general use.

Another kind of pottery found in Reading, sometimes in association with the later green-glazed ware, is a hard salt-glazed stoneware of a mottled brown colour, consisting chiefly of pint-pots and bottles, such as might have been used in hotels and taverns. It is probably German ware of about the end of the 16th century. Save a rude frill round the base, there is no ornamentation on these vessels, as on the imitation "Greybeards," which were made at Fulham at a later period, of which there are two or three local

specimens in the Museum. Respecting the introduction of foreign pottery there is a petition from William Simpson to Lord Burghley, of 1581, on the subject of establishing a pottery of stoneware in England. And as early as 1561, Queen Elizabeth had granted a patent for settling various Dutch artificers. Glazing with salt created quite a revolution in the potter's art. The discovery is stated as having been made in 1680 by accident, from the boiling over of a salted fluid on to the sides of an unglazed earthenware pot, which on cooling was observed to be glazed. But this is a myth, for it is well known that salt-glazing was known abroad centuries before that, and found its way to England in common with other arts. Be this as it may, it appears that Mr. Thomas Miles, of Shelton, in Staffordshire, used the salt glaze about 1685 in the manufacture of stoneware. But somewhat earlier, viz., in 1671, John Dwight had set up his salt-glazing kilns at Fulham; and later it was used by the brothers Elers at Burslem.

At about the same period, viz., the 17th century, but dating from the first decade of the century, a handsome pottery was in vogue, made of strong clay, and coated with a thick lead glaze, richly coloured with iron, manganese, or copper. The better known of these peculiar vessels are the Posset-cups, and the large drinking cups or Tygs of two or four handles. But the number of handles is found to vary from two to ten, in some instances arranged as double handles, or side loops, one under the other. They were much prized among the Old English society of the 17th and 18th centuries, when strong ales were a leading feature at the table, the cups being handed round from guest to guest in the intervals of using the long clay tobacco pipes. Staffordshire was the chief seat of their manufacture.

OLD ENGLISH POTTERY, &c. (*In Turret-Case No. 22.*)

A large earthenware jar, green-glazed, splotted, with tooth ornamentation, and with a spigot-hole near its base. Found in the Holy Brook, at the back of the Abbey. It came probably from the kitchen house of the Abbey: date about the end of the 13th century. (*Stevens Coll.*)

Six Pitchers dating from the 13th to the 15th century:—

- 1—A Pitcher found in a foundation in Blagrove Street. (*Stevens Coll.*)
- 2—A Pitcher, dredged from the Kennet. (*Mr. Alfred Palmer*).
- 3—A Pitcher taken from the foundation of Mr. C. F. Oliver's house in Minister Street. (*Mr. C. F. Oliver*).

4—Pitcher from an old building in Abingdon. (*Stevens*).

5—Pitcher from the foundation of Mr. Wellsted's house, Broad Street. (*Mr. Wellsted*).

6—Pitcher found at Reading Gas Works. (*Gas Works Series*).

Five antique Costrels from the 13th to the 18th century :—

1—A Costrel or Pilgrim's Bottle, 13th century. (*Mr. W. I. Palmer*). This is a rare and curious specimen of the Pilgrim's Bottle, in dull green glaze. In common with all costrels it has two holes in the neck, through which a cord was passed, by which it was carried on the shoulder. It was used in the early pilgrimages to Holy places, shrines of saints, etc.

2—A marbled, glazed Costrel of the 16th century, found at Drayton, Berks. The marbling is in red and white lead glaze. A pure white glaze was in later use which was of tin. (*Stevens Coll.*)

3—Costrel from West Street, Reading, a globular form, 16th century. (*purchased*).

4—A Flask, marbled, 18th century. (*purchased*).

5—A Costrel form of stone-ware bottle, such as was used in the harvest field, 18th century. (*purchased*).

Also a Spanish Costrel, in decorated porcelain, in *Turret Case 21*, from *Mr. W. H. Cooper*.

An ornamented Jug, found at Oxford. (*Stevens Coll.*)

A green-glazed Jug, 15th century. (*Gas Works Series*).

A Pipkin, green-glazed, 16th century. (*Mr. Denton*).

Three marbled-glazed Pipkins, found in Cross Street, of about the 17th century. (*purchased*).

A decorated Mediæval Vase, damaged. (*Mr. Fleming*).

Seven green-glazed vessels (kitchen ware) found in digging out foundations in various parts of the town. (*purchased*).

A group of pottery, comprising a Pitcher, a "Money-pot," a "Greybeard," German stone-ware, &c. (*Mr. Alfred Palmer*).

Floor-Case 9 contains a quantity of pottery of the green and brown-glazed forms already noticed, discovered at the Reading Gas Works. (*Gas Works Series*).

A green-glazed Saucer. (*Mr. Ough*). A "Greybeard," from the Holy Brook. (*Mr. Harrison H. Jones*). A "Greybeard" from the Kennet. (*Mr. G. Long*). Also a "Grey-beard." (*Davies Coll.*)

Two antique Jars with loop-handles. (*purchased*).

A splotted glass Jug, 18th century, rare. (*purchased*).

Three small Cups with handles in dark brown glaze.

A stoneware Jug, inscribed I. JONES, LAMBOURNE, 1784. (*Mr. Lawrence*).

A green-glazed Candlestick, 16th century. (*Stevens*).

A similar Candlestick in green glaze. (*Mr. G. W. Smith*).

A brown-glazed Candlestick, 18th century. (*Mr. Tull*).

A Salt-cellar in grey ware, 16th century, found in the foundation of the Elephant Inn, Market Place. (*Stevens*).

An *Amphora* in grey ware, found at the old Bull Inn, Broad Street. This is a singular form, and might be of foreign manufacture. (*Mr. Bottrill*).

A handled Cup, in dark brown glaze, from the foundation of the Capital and Counties Bank. (*Mr. G. H. Stubington*).

A double-handled Cup, found in the foundation of Messrs. Heelas's premises. This specimen, in common with all the heavily-glazed cups, in dark brown, is of the 18th century. (*Mr. D. Heelas*).

A Money-pot, known as a "Money-pig," 16th century. (*purchased*).

A Money-pot, inscribed T. W., 1834. (*Mr. W. I. Palmer*).

There are several rudely ornamented unguent pots of about the time of George III, and later.

Also a Tea-bottle, a three-handled Cup, and a small Vase, all of about the 18th century. (*Davies Coll.*)

A horn-shaped copper drinking Cup. (*Mrs. Welman*).

A horn-shaped copper drinking Cup, silvered, dug up in Messrs. Ferguson's premises. (*Messrs. Ferguson*).

A blue porcelain Canteen-cup, with a metal lid, bearing the French Imperial Eagle in white, with $\frac{1}{2}$ KAN, and N. on the Eagle. The N. is evidently the initial of Napoleon. It was given to Mr. Smith, the father of the donor, by a prisoner of war stationed at Brighton, who brought it from the field of Waterloo. (*Mr. J. P. M. Smith for Stevens Coll.*)

The Case contains in addition several Cups and Basins in blue and white, etc., which were dug up at various places in Reading, but which need not be individualised.

Venetian Glass.

TURRET CASE NO. 22.

Venetian glass has long been famed for its beauty, which is derived chiefly from its delicacy and tenuity, and for the gracefulness of its curves. The first impulse in its manufacture appears to have followed the capture of Constantinople in 1204. There are many varieties of early Venetian glass, the most common being the colourless or transparent kind. There are the gilt or enamelled and the crackled varieties, and the marbled opaque glass. The *Avanturine* is another form, obtained by mingling fragments of gold leaf or metallic filings with the glass when melted. The *millefiori* or mosaic glass, after the old Roman mosaic (of which there are specimens in the Museum from Silchester), was also one of the early Venetian industries; and the so-called lace-glass, which is reticulated, and of which there are several forms.

The exquisite varieties of colour in Venetian glass it is almost impossible to describe—green, purple, and the variegated in various pigments; while in some instances the glass is made to resemble jasper, chalcedony, tortoiseshell, and lapis lazuli. The lace-glass is a pure and chaste example, having threads of white or colour running through it in a most artistic manner. The lightness and strength of the Venetian glass arises from the presence of lead in its composition. The making of Venice glass occurred in England in the reign of Queen Elizabeth by Jacob Vessaline, and some of the copies executed by him are readily sold as genuine Venetian. Murano was the chief seat of glass-making during the 15th and 16th centuries, the period of the finest productions. Dr. Salvati has in recent times made beautiful reproductions from ancient models.

Eight pieces of fine old Venetian glass, deposited by Mr. Blackall Simonds.

A handsome figured glass, with frilled blue and plain glass side-loops.

A pair of figured goblet glasses, with side loops of blue and plain glass.

A plain glass with a graceful stem.

A lace-glass with a twisted stem, and side-loops in blue and plain glass.

A cup, in blue and gold.

A pair of fluted toilet bottles in deep purple and gold.

Early Sandstone Effigy.

BENEATH TABLE-CASE 14.

In digging out for foundations at No. 4, Broad Street, in the early part of the present year, a remarkable fragment of sculpture was discovered, in the head and neck of a knight posed on a cushion or block, beneath which was part of a second block, which was the bed for the reception of the figure. These lay on part of a heavy angular sandstone slab, which was evidently the upper stone of the altar-table which had supported the effigy and its equipments. From the size and length of the head the figure must have extended about 7 feet. It is in fine sandstone, and from the links encasing the neck the figure must have been represented in chain-mail, with a continuous hood. The effigy conveys the impression of being of about the end of the 12th or the beginning of the 13th century. As no important building appears to have stood where the fragment was discovered, the inference is that, after its mutilation, the fragment was brought from the Abbey. (*From Mr. A. L. Cooper, Architect*).

Ecclesiastical Tiles.

WALL-CASE NO. I, LOWER SHELF.

Some of the finer ceramic work of the Middle Ages is to be found on the floor-tiles of Ecclesiastical buildings. And it is somewhat remarkable that we do not find equally good work in the pottery of the same period. These beautiful tiles were frequently manufactured in the great religious establishments from the knowledge obtained by them from foreign countries. The earliest date for the tiles is the 13th century, but they continued to be made down to as late as the 16th century, and even later. Some of the tiles of the 14th century are very fine; and they are all wrought with strong clays, and are well burnt and richly glazed. Kilns for the manufacture of encaustic tiles have been found at Malvern, and in Wiltshire, Gloucestershire, Shropshire and Staffordshire. The earliest tiles were of one colour, the designs on them being incised or impressed; but later they were inlaid, hollows being moulded in the tiles, which were filled in with differently coloured clays, but often with white clay. Rich designs were the result of this process, although in some cases the figures were sufficiently rude. The figures are very various, and are frequently derived from natural objects, such as foliage and flowers; while many are taken from badges, shields, and heraldic devices. Also from animal forms; and some embellishments are in the shape of animal-like human heads.

Tiles, and fragments of tiles from Reading Abbey. The designs of some of these represent the cross *fleur-tée*, with *fleurs-de-lis* in the angles, an emblem used as early as 1234, which might be the date of the tiles. Others bear lions, impressed in white clay, and well glazed. They are evidently heraldic; but the figures are rude, and of early date. (*The contributors of these are Messrs. Dodd, Perry, Blandford, and C. Bloomfield*).

Tiles from Old Greyfriars Church, bearing gothic crosses with rude flowers in the angles. (*Messrs. Cooper & Son*).

Tiles from St. Mary's Church, Reading. Design—the cross *fleur-tée*, with a circle, and foliated angles. This form with the circle appears to imply Christianity encircling the world. (*Mr. Gutch*).

Tiles from Arborfield Old Church. They bear for design the cross *recercellée* with *fleurs-de-lis* in the angles. In these tiles the figures are impressed, and well glazed. (*Mr. W. Cordery*).

Tiles from Wherwell Priory, Hants. Designs—On one a winged lion of St. Mark with foliage; on others sundry floriated devices and remarkable leonine human heads. (*Stevens Coll.*)

A Tile from Selborne Priory, with a similar leonine head. (*Stevens*).

Tiles from St. Mary Bourne Church, Hants, with similar human heads; but the border tiles differ. (*Stevens Coll.*) It is likely, as these Hampshire tiles all bear the peculiar heads, that they came from the same kiln.

Fragment of a tile from Oseney Abbey, bearing foliage, and part of a lion rampant. (*Rev. J. M. Guilding*).

In the Case No. 1, with the tiles, are fragments of architecture from Reading Abbey, from Mr. W. Winder. And immediately underneath the Case is a heavy stone *Mortarium*, probably from the Abbey kitchen. From Mr. A. Sutton.

Also fragments of decorated columns from the Abbey. (*Mr. F. Albury*).

A square sandstone *Piscena*, with a drain, from Arborfield Old Church. (*Stevens*).

A square sandstone basin, without a drain, probably an *Aumbry*, locality unknown.

Abbey Tokens.

COIN TABLE No. 2.

Abbey Tokens are known by a variety of titles, viz.: "Jettons," "Counters," "Abbey-pieces," "Monk's-money," etc. They occur in gold and silver, but more frequently in brass and copper; and they date from the 13th century, but they were used as late as the 16th century. It is difficult to define their precise purpose; but as many of them bear early religious symbols and inscriptions, and are met with more commonly in the neighbourhood of monastic buildings, there is little doubt that they were used by pilgrims, mendicant friars, and as passports to religious houses. At the same time they appear to have done duty as counters, and as a medium of exchange, and also as money. The designs are often similar to those on ecclesiastical tiles, such as a *cross-floriated* on one face and three *fleurs-de-lis* on the other, or a ship with four *fleurs-de-lis* in a lozenge, or again, a heart-shaped shield with *fleurs-de-lis*; another emblem is the winged lion of St. Mark. The inscriptions are in Lombardic characters, one of the commoner containing the opening of the Latin hymn to the Virgin, *Ave Maria stella Dei Mater*. Of twenty-three Abbey Tokens in the Museum, five are of small silver inscribed *Gloria Tibi*; three of brass bear the lion of St. Mark; eleven of brass bear *Ave Maria Gracia*, and others have the same with *Plena* added. Some of the Tokens carry the loyal motto, *Vive le Roi*. A small silver token, dated 1530, bears the inscription

in French, "Oh Mary give bountifully, and pray for us." The figure is that of Mary with a halo: also a cross with an M, and two hearts, referring to those of Jesus and Mary.

NUREMBERG TOKENS (*Coin-Table 2*). These Counters are frequently found, and were evidently introduced in large numbers, from the middle of the 16th to late in the 17th century. They bear the names of four makers, of whom, out of thirty-one legible specimens, twenty-one were issued by *Hans Krawwinckel*, five by *Hans Schults*, three by *Hans Lawfer*, and two by *Wolf Lawfer*.

Medieval Relics.

BRONZE TABLETS. (*In Wall-Case 12*). A pair of small enamelled bronze Tablets, hinged, from Normandy. (*Davies Coll.*)

PILGRIM'S SIGN. *In the same Case*, a heart-shaped pewter Pilgrim's Sign or Pendant. The figure on its front is probably intended to represent the Archangel, St. Michael. These signs were worn as badges on the sleeve or elsewhere by pilgrims during the Middle Ages. No symbol of pilgrimage is better known than the scallop-shell. The poor travelled their weary pilgrimages on foot; but the higher class went in cavalcade, such as has been so graphically described by Chaucer. (*Stevens Coll.*)

BRONZE HALF-CLASP OF BAG. (*In Floor-Case 15*). An interesting relic in the shape of a *half-clasp* of a bag was found in Minster Mill Stream at the time that the new buildings were being erected, in 1892, at Messrs. Blandy and Hawkins's Brewery. It bears the following inlaid inscription:—"DOMINVS . DEVM . BENEDICAM . SIMVL . IESV." (*From Messrs. Hawkins*).

LEADEN BULLA OR SEAL. *In Floor-Case 15* is placed a lead Bulla or Seal (for attachment to a Papal Document) of *Urbanus*. *Obv.*:—VR. BANVS. P. P. IIII., which means URBANUS P(A) P(A) IV. *Rev.*:—S. PA. S. PE., meaning *Sanctus Paulus*, *Sanctus Petrus*, the heads of St. Paul and St. Peter being shown beneath, according to the usual type of that period. Urbanus was elected Pope on the 29th of August, 1261, and died on the 2nd of October, 1264. The relic came most likely from the Abbey. It was found in the garden of Mr. F. J. Blandy, Maitland Villa, Downshire Square, in 1874. (*From Mr. F. J. Blandy*).

THE BETRAYAL OF CHRIST. *Wall-Case 1, 3rd division*, contains a striking fragment of sculpture in alabaster of about the 13th century, representing the betrayal of Christ. It is evidently part of an Altar Plate, which represented scenes in the life of Christ, this particular portion depicting the moment when Judas betrayed his Master with a kiss. In front appears the High Priest's servant, whose ear Simon Peter struck off, as stated by St. John. (*Stevens Coll.*)

MANORIAL WEIGHT. (*In Table-Case 15*). The weight referred to was found in removing chalk at Hurstbourne Priors, Hants, in 1860. It is a *standard* Manorial Weight, of copper, such as was used by Lords of Manors, and bears on its circumference three Shields of Arms, the Arms representing *Or*, an Eagle, displayed *vert*, which appear to be those of the Mortimers. One of that powerful family held Swampton Manor, now part of the Hurstbourne Manor, at the time of Domesday, and in the 13th century, and it is likely that the weight appertains to a member of that family. (*Stevens Coll.*)

STANDARD WEIGHT. (*In Table-Case 15*). A square of lead, bearing a Crown, with the initials E. L., probably a standard weight. It was found in Reading.

PLATED SALVER. (*In Wall-Case 12*). A silver-plated Salver, bearing in its centre a Gothic Cross, with pellets in the angles, of about the 15th century. (*Mr. G. C. Smith*).

English Arrow-heads.

When it is considered that arrows were used from the earliest times, and that archery has been continually practised over the face of England, it is remarkable that Old English arrow-heads are almost the rarest objects met with. The numbers used in the early battles must have been enormous, for it has been stated, of course somewhat poetically, that in their flight they "darkened the sun." It is likely that a large number were recovered for future use, yet their loss must have been very great; and the inference is, that being of metal and of small size, they have perished. One only has found its way

to the Museum. On the other hand, arrow-heads of flint, from their imperishable nature, remain. They were employed long after the introduction of metals. In Saxon times the arrow-head was chiefly of the stemmed form; but the Normans are represented on the Bayeux Tapestry as shooting with triangular arrows hollowed at the base.

IN WALL-CASE 12.

A stemmed arrow-head of Saxon type, from the Kennet. (*Mr. G. Long*).

A quarrel, or cross-bow bolt with four sharp angles, and a screw for fixing to the shaft. (*Mr. C. Cooksey*).

A quarrel with a flat blade and a screw for attachment, found at Caversham. (*Mr. Winder*).

A cross-bow, in Wall-Case 1. (*Mr. Chapman*).

A bronze bow-strainer, 15th century (in Floor-Case 15), rare, from Basingstoke. (*Mr. C. Cooksey*).

Spurs.

The Spur does not appear to have been used by the Assyrians, the Egyptians or the Greeks, but it was worn by the Romans, a small prick (*Calcar*) being attached to the heel. From the Romans probably it passed on to the Gauls. The spur is commonly described as of three parts, the shank, the neck, and the prick or rowel. The earliest form of spur is the single prick of conical shape rivetted to the shank. The prick varied somewhat in sharpness and in length; and at about the 13th century the rowel was added, but most of the rowels belong to the 17th century. Some spurs had two and even three rowels. In the middle of the 15th century the shank was of great length, with a rowel of six or eight points, the barbing of the horse rendering the length necessary in order to reach the horse's flanks. This was somewhat obviated in the time of Edward IV. by curving the shank, and lengthening the spikes of the rowel. In the 17th century spurs became very rich in ornamentation, those worn by the Cavaliers on their jack-boots being often of great size, fantastic in design, and gilded; and attention was called to them by their clanking as the wearers strode along. There is no prick-spur in the Museum, but there are some neat specimens in bronze.

The series of spurs consist of 20, of which the following are the principal forms :—

A bronze spur with a rowel of three points, *in Wall-Case 11.* (*Mrs. G. Ayres*).

In Case 12, a bronze spur with a rowel of four points. (*Mr. Patey*).

An elegant spur (*in Central Case No. 17*), with a curved heel-piece, and a rowel of eight points, found at Wittenham, and stated as Roman. but it is Mediæval. (*Davies Coll.*)

A plated spur, with a curved heel-piece, from the Thames. (*Mr. G. Long*).

A silver-plated spur, with a long neck, from the Thames, 16th century. (*Stevens*).

Spur, with a shorter neck, 16th century.

A bronze spur, with a bulb-rowel of five points.

An iron spur, with an angular shank, a short thick neck, and a large twelve-pointed rowel, 15th century. (*Stevens*).

Two antique spurs found in the Butts, one being a delicate, attenuated form, with almost needle-points to the rowel. (*Mr. A. Morris*).

A pair of strong, large, iron spurs, with horizontal rowels, Cromwellian.

A pair of Spanish or Mexican spurs. (*Mr. Cripps*).

A pair of ornamented spurs from Chili (*in Turret Case No. 21*). (*Bland Coll.*)

Spoons.

WALL-CASE NO. 12.

The Museum contains a number of the commoner types of spoons in the various materials of silver, latten, lead or pewter. There are none of the very early forms; but it may be stated in regard to spoons of various dates that there appears to have been not much difference in their character from the middle of the 15th century to about the time of Charles II. The bowl was then pear-shaped, the handle round, and embossed at the end. The fashion then became altered, and spoons were introduced with flat stems and handles, with the ends broad. The extremity was at the same time divided by clefts into three points, and the bowl was rendered oval. At about the time of George I. the bowl was made longer, and the extremity of the handle was quite round, turned up at the end, and bore a ridge down the middle. Towards the end of the reign of George II. the present fashion came into use. Apostle spoons continued to be made as late as 1665, and some very fine examples are extant.

The collection consists of 21 spoons.

A seal-headed spoon, 16th century.
(*Reading*).

A seal-headed spoon, 16th century.
(*Mr. G. C. Smith*).

An Apostle spoon, 15th or 16th century.

An Apostle spoon. (*Mrs. Butler*).

A baluster-headed spoon. (*Mr. G. Long*).

A bronze seal-headed spoon. (*Mr. C. Cooksey*).

A silver-plated spoon with a plain handle. (*Reading*).

A bronze snuff shovel, from Broad Street, 17th Century. (*purchased*).

A silver salt spoon. Old Reading.
(*Stevens*).

A small spoon with ornamented stem, *temp.* Elizabeth. (*Mr. C. Cooksey*).

A silver Apostle spoon, with twisted handle. (*Reading*).

Spoon with a cleft handle, *temp.* William II.

A brass spoon with cleft handle, from St. Mary Bourne, Hants.
(*Stevens*).

A plain spoon, silver plated, from St. Mary Bourne. (*Stevens*).

Spoon with a cleft handle, date 1668. (*Mr. W. L. Nash*).

A spoon with a plain handle, *temp.* George I. (*Mr. W. L. Nash*).

A spoon, *temp.* George II. (*Mr. W. L. Nash*).

Keys.

A considerable number of keys from Reading and various parts of the county have been received at the Museum, a few of which are antique, but all are curious, and range probably from about the 16th to the 18th century. As specimens of the local ironworker's art they are of considerable interest, and furnish an intelligent study in tracing the different designs, in reference to the period they represent. Most of them are of the plain annular form, which stamps them as later than mediæval. In the 13th and 14th centuries the bows were frequently of a lozenge shape; while in the 14th and 15th centuries they were usually trefoil in form, and there were considerable varieties. Rude latch keys were known in the 15th century. In the 16th century keys became more ornate and fanciful in pattern; and the decoration reached its climax during the reign of Elizabeth, when scrolls, crosses, crowns, etc., were interwoven in a very ingenious and tasteful manner. At about the beginning of the 17th century keys became more simple in design.

The collection consists of 43; and the bows are various:—oval, circular, oblong, oblong with rounded angles, heart-shaped and

trefoil. The stems are circular, angular, flattened, and half-circular with a boss; and in some cases the stem is lengthened at the end and pointed. The levers are plain, T-shaped, S-shaped, or they have parallel bars, while others have very peculiar *wards*, evidently to avoid imitation.

In Case 17, a heavy iron key, with a trefoil bow, stated as from Godstow Nunnery. (*Davies Coll.*)

A large iron key, date 1407, from Shipton-on-Cherwell. (*Mr. Thurlow*).

Three keys, dredged from the Kennet. (*Mr. Alfred Palmer*).

A key with pointed stem. (*Mr. H. M. Wallis*).

(*In Case 12*). A heavy bolt or latch-key, with half-circle stop, flat underside, rare, of about the 15th century. Found in digging foundations in Reading.

Two keys of Saxon type. (*Davies Coll.*)

Six keys from the Kennet. (*Mr. G. Long*).

A key, rare type. (*Mr. W. I. Palmer*).

An early latch-key. (*Davies Coll.*)

An antique key. (*Mr. F. Albury*).

Eight keys, various. (*Davies Coll.*) Some of these are stated as Mediæval; but several of the cabinet forms appear to be late Tudor. The trefoil bows are elegantly designed, and the *wards* are ingenious. In one the type is antique, the bow contains a Gothic cross, with pellets in the angles, and must be of about the 15th century.

Two bunches of hinged keys, six on one hinge, and four on the other, for use in public buildings in Old Reading.

Central Case No. 17 contains a series of six locks and keys, one or two of which appear to be Flemish. (*Davies Coll.*)

Buckles.

WALL-CASE NO. 12.

In Saxon times remarkable buckles were worn, chiefly to fasten the girdle or belt for securing the knife or *seax*, and the sword. Some of them were very large and handsome, such as the buckle found in the tumulus at Taplow, which is of chased gold, jewelled, of great size, and certainly the finest hitherto found in England. In England, small buckles were worn in the early part of the 18th century, at the time of Queen Anne, and they gradually increased in size and importance during the reign of George II. till the beginning of George the Third's reign, when very fine plated forms

were worn. Towards the close of the 18th century the fashion began to change, and shoe-strings came into general use. Buckles are of about the same period as wig-rollers. Some neat examples have been dredged from the Kennet and Thames, which are of the various metals, bronze, iron, and silver-plated, while one is of silver. Many of them are neatly ornamented.

The Collection contains 23 examples.

A square buckle, curved, with prong-shaped hinge.

A square silver buckle, with chased rim, from Gloucester.

Two bronze, curved buckles, with prong-shaped fixings, rims ornamented.

Twelve buckles, iron and silver-plated, with embellished rims. (*Mr. G. Long*).

Finger Rings.

The Finger-rings in the Museum number fourteen; but they include no rare examples. Few articles of personal ornament have been more universal from early times. The Egyptians indulged in costly signet-rings, which were chiefly of gold, and often of great size. Sir G. Wilkinson mentions an Egyptian ring which contained twenty pounds worth of gold, and was inscribed with the name of King Horus, of the 18th dynasty, 1337 B.C. Their favourite design for signets was, as one might imagine, the *Scarabæus*, the emblem of their Sun-deity, Osiris. The Greeks wore a profusion of rings, of which some were signets and others were jewels. The ancient tombs of Etruria have furnished beautiful specimens, showing that the Etruscans were skilful workers in gold. Among the Roman people bronze was largely in use for rings for ordinary purposes, but gold was the medium for patrician wear; and their gems for rings are admirably cut, as examples in the Museum from Silchester testify. In the Scriptures we read of rings, as when Tamar receives a signet-ring from Judah as a token of recognition; and when Pharaoh "took off the ring from his hand, and put it on Joseph's hand," thereby investing him with authority. A lengthened chapter might be written on rings. The wedding ring, for instance, which is considered to have originated with the Romans, and was given at the betrothal, as at the present day. Then there was the matrimonial *gimmel-ring*; and the ring worn by clerical dignitaries, expressing that they were wedded to the Church, and was often buried with its possessor. Other rings were worn as charms against disease, witch-

craft, or invisible enemies, or for their talismanic properties. These last were usually set with particular stones, as the ruby, turquoise, beryl, sapphire, and especially the *toad-stone*, of which Shakespeare speaks when he alludes to the toad as having "a precious jewel in his head." Some gems were believed to render their wearers proof against steel weapons, and even to make their owners invisible. Cramp-rings were well-known superstitious agents for the cure of certain maladies, and to enhance their potency they were sometimes made from coffin handles. *Posie-rings* should be noticed. They were simply plain hoops, bearing a single line engraved round their circumference as a *souvenir* or for a love-token. Lastly, there were poisoners' rings, which contained some deadly material beneath the stones, and were worn as instruments of death.

Of the rings in the Museum, ten are plain, two are gem-rings, and two are signets. The plain rings are the most remarkable, and they are the earliest. Three of the specimens are simply twists of flat bronze wire, somewhat spiral, which adhered to the fingers as springs. One of the examples is British, and the other two are Saxon. They are occasionally found in Saxon graves. Another interesting form is composed of ten strands of fine iron wire, which was found round a finger bone in the grave of an American Indian.

From the 11th to the 14th century in England, the art of gem engraving had almost died out; and it is not unusual to find Roman gems in English settings. An example of this is present in *Coin-Table 1*, in a gold ring bearing a gem engraved with *Hercules bibax*.

Wig Curlers.

As wigs are of great antiquity, so also must be the appliances for curling them. The earliest examples of false hair yet known are the Egyptian wigs in the Berlin and British Museums: and there is very little doubt that false hair was used by the Greeks and Etruscans, as implements of terra-cotta, which may be presumed to be ancient wig-curlers have been found in Etruria. There are one hundred and twenty-nine examples of those in the British Museum, from the Necropolis of Vulci. Implements like those from Etruria, but measuring only two inches in length have been discovered with Roman remains in London, so that they were evidently employed in Roman times. The largest find of wig-rollers was made in 1867, in West Smithfield, when a hoard of about 2000 came to light. These probably originally belonged to a

manufactory of the article. It appears that tongs were used for curling the natural hair, and wig-curlers for wig-dressing. They were made of various materials, wood, terra-cotta, and pipe-clay; and when used, those of clay or terra-cotta were heated on a stove, while those of wood were placed in hot water. The old generation of barbers used to relate how they mounted the wigs on blocks, and rolled the locks around the heated "Curlers."

WALL-CASE 12.

Fifteen "Curlers" occupy a card. They are made of pipe-clay, and are of about 3 inches in length, and are narrow in the middle with bulbous ends; but they have been found smaller. They were dug up in Reading; but some examples, in *Floor-Case 15*, came from Newbury. They are of about the 17th or 18th century; and were used when wigs were more fashionable in England. (*Stevens Coll.*)

Tobacco Pipes.

WALL-CASE 12.

Early clay pipes are constantly dug up during building operations in the town, and many have been received at the Museum. The smaller specimens are contracted at the mouth, and have no spur, and are sometimes stamped on the flat at the base of the bowl. In early times these small pipes were believed to be of fairy origin, and were called "Fairy pipes." We have an index to the date of some of the earlier pipes from the fact that the incorporation of the craft of tobacco pipe makers occurred on the 5th of October, 1619. Aubrey states that Amesbury was famous for the best tobacco pipes in England, and that the clay for making them was brought from Chittern. It is believed that older narcotics were used, such as hemp and henbane, before the time of Sir Walter Raleigh and the "Maiden Queen"; and Wilson writes of the old wives of Annandale smoking dried moss gathered on the moors. In Queen Elizabeth's time tobacco was sold at five pounds the ounce; and later it was the practice for those who indulged in the luxury of smoking to place five-shilling pieces in the opposite scale. It is not remarkable therefore that the early pipe-bowls should be so diminutive.

Fourteen pipes, varying in size and character, dating from the 16th century.

Hour Glasses.

TURRET CASE NO. 22.

Sand-glasses were used for a variety of purposes, and were made to run from half-an-hour to twelve hours, but the most common was the hour-glass. In the time of Elizabeth, fellows of colleges carried them in their hands to mark the time; and physicians, in Dr. Cullen's time, carried sand-glasses to count the patient's pulse. These pulse-glasses were about twice the size of the common kitchen "egg-boiler," and they are now very rare. The hour-glass was used in the cottages of the poor at the beginning of the present century for cooking, and was set running at the dinner hour, the labourer returning to his work when the sand had run through. The price of an hour-glass in 1564 was one shilling. They were common in churches, and usually occupied an iron stand or bracket fixed by the side of the pulpit, or attached to it.

1—A large "pulpit-glass." (*Davies Coll.*)

2—A common cottage "hour-glass," from Dunley, a hamlet in the parish of St. Mary Bourne, Hants. It was used by the family, for domestic purposes, at the beginning of the present century. (*Stevens Coll.*)

Gibbet Irons.

TURRET CASE NO. 22.

On the middle shelf are exhibited a head-piece and a leg-iron, which formed part of the frame in which was suspended the body of Tull or Hawkins, who murdered Belamore in a lane near Round-oak, on the 2nd of February, 1787. It was usual to describe the gibbeting of criminals as hanging in chains, but in this case it is evident that the bodies were suspended in frameworks of hoop-iron. It appears that Tull and Hawkins were hanged in a fir wood called Gibbet-piece, now belonging to Mr. Richard Benyon, close to the road from Burghfield Common to Upton, and on the borders of the parishes of Upton and Mortimer.

1—Head-piece of iron without its swing-hook or neck-rivet, which were probably removed in order to take away the skull. It was obtained by the late Sir Paul Hunter from a blacksmith at Mortimer, and presented by him to the Museum.

2—A leg-iron, or case for the leg, presented by Mr. F. W. Albury.

“Hanging in chains” was once largely practised in England, and apart from assize and other records, many reminiscences of the barbarous usage remain in such names as “Gallows-field,” “Gallows-tree-piece,” “Gallows-hill,” “Hangman’s-wood,” and “Gallows-tree-common.” Such names are scattered all over the country, and appertain to the treatment of felons in the Middle Ages, when “liberty of gallows” was frequently a manorial right. How often in old documents we find Lords of Manors presenting claims of free warren, and to hold liberties of gallows, tumbril, and assize of bread and beer. A pond was sometimes associated with the gallows to drown female felons.

Scolds' Bridles.

On the stand underneath the gibbet irons are two of those peculiar instruments for the punishment of scolds, known as Scolds' Bridles. They are also called Branks, and are fit associates of several other degrading methods of punishing local offenders, now happily abolished. Of these may be named the pillory, stocks, and tumbril or ducking-stool, all of which were formerly used in Reading. The ducking-chair was the legalised instrument for the punishment of scolding women. To this the brank had no pretensions, although it was frequently employed for that purpose. It is not of very great antiquity, few being known earlier than the end of the 16th century. One of the earliest is the Walton-on-Thames Bridle, which bears date 1633. It is preserved in the church, and bears the following lines:—

“Chester presents Walton with a bridle,
To curb women's tongues that talk to idle.”

It was given, it is said, to the parish by a gentleman named Chester, who had lost an estate through the mischievous babble of a gossiping female. The Reading Brank bears a soldier's feather at the top, and is padded on the inside at the upper part, probably to

prevent the gag from falling below the level of the mouth. A chain was commonly attached to the implement, by which the poor gagged creature was led about, and if she refused to walk she was wheeled in a barrow, or chained to some public place, such as the Market Cross, and submitted to every indignity from a mob of ruffians.

In applying the instrument the head was thrust inside, and the tongue-plate was made to enter the mouth, and press on the tongue, so that the victim could not speak. The door was then closed at the back of the head and was usually secured by a small padlock. Scolds' bridles were used generally over England, but the Northern implements appear to have been more severe than those used in the South. In Scotland, at Forfar, they had a fearfully severe gag, which was placed on witches when they were led out to be burnt at the stake. But the object of its use was not so much to inflict punishment as to prevent the supposed witch from imparting the secrets of her craft.

1—The Reading Brank. It was kept in the prison till February, 1883, when, with the permission of Her Majesty's Prison Commissioners, it was sent by Capt. F. Blyth, the governor of the prison, for exhibition in the Reading Museum. It is not a very severe form, like some examples in the North of England.

2—Brank from the Test valley, St. Mary Bourne. It was found in an old lumber room, with some other antiquities. It is simply a head-piece, with a gag which slides backwards from the nose-piece into the mouth. There are no records of its use. A photograph with the branks shows their mode of application; and a plate of sketches of Scolds' bridles illustrates various forms used in other parts of England.

Leather Bottles and Cups.

WALL-CASE 1, AND TURRET-CASE 22.

"Leathern bottles," "Black-jacks," etc., were articles of considerable industry in the Middle Ages, when pottery was scarce, expensive, and easily broken. In the 16th century wooden trenchers, and "earthen" pots were used at the tables of the wealthy; and in the 17th century pewter was also employed. We have an example of this in the Old Corporation Plate of Reading. And the writer remembers when pewter dishes and plates were common in farm

houses at the beginning of the present century. With reference to the use of leather utensils there is an entry in the Household Book of the Duke of Northumberland, in 1512, which directs that “whereas *erthyn potts* be bought, that *ledder potts* be bought for them for serving meallys in my lord’s hous.” Leather bottles were much in request in the time of Queen Elizabeth; and they came later to be greatly valued, on account of their durability, by shepherds and farm labourers, who took them to the harvest fields. Their appreciation is expressed in the following lines from the *Roxburghe Ballads*:—

“And I wish in heaven his soul may dwell,
Who first devised the leather bottle.”

The Leather articles in the Museum consist of:—

No. 1—Large leather flask, from Surrey.

No. 2—Small flask, Reading. (*Mr. Gutch*).

No. 3—Leather drinking cup, Reading. (*Mr. Gutch*).

No. 4—Leather bottle. (*Messrs. Ferguson*).

No. 5—Leather bottle. (*purchased*).

No. 6—Leather bottle. (*purchased*).

No. 7—Leather bottle. (*Mrs. Ryan*).

These bottles are very thick, and coarsely stitched, and so durable that they were often utilized in later times by blacksmiths for containing nails and scraps of iron, square holes being cut in the sides to admit the nails. Two of the bottles above listed are examples of this.

Rush Holders.

TURRET-CASE NO. 22.

The Rush-holders listed below were mostly obtained in Berkshire. They refer to a period when the fats were too scarce and expensive to be used for tallow, and when merely a film could be spared for illumination. One of the earliest forms of candlestick was the *pricket*, which was an iron stem, on a wood or iron foot, with a prick at the top to bear the candle. But the small rude iron socket was early, with a spike at the end, which was driven into the wall or woodwork of the half-timber houses of the Middle Ages, as a kind of bracket. They also had wood or iron stands. And it might be

noted that similar bracket candle sockets are in the Silchester collection. To an early period also, evidently introduced for the sake of economy, belongs the clip or rush-holder for grasping the tallow-coated rush. In some examples the pricket and socket are found on the same stem; in others the rush-holder and socket occur together. Specimens of this latter form are present in the Museum. Indeed, a large floor illustration of the implement, with a sliding bracket for the candle holder and forceps, stands near the Bible table. These early appliances may be dated from the 14th century; and the rush-holder was hardly extinct at the beginning of the present century. Not long since aged females might be seen on the moors cutting rushes, which they carried home and reduced to certain lengths; they then peeled, dried, and dipped them for winter use. There is a rare example of a dipping-boat of earthenware in the Museum, which was found with two of the rush-holders in an old granary in Berkshire. It has four trivet legs on which it stood over the glowing embers, while the rushes were drawn backwards and forwards through the melted tallow till they were sufficiently coated.

1—Rush-holder with plain wood stand. (*Mr. S. Pamplin*).

2—Rush-holder with turned foot. (*purchased*).

3—Rush-holder with horizontal clip, apparently for holding two rushes. (*Mr. S. Pamplin*).

4—Ditto, ditto (*purchased*).

5—Rush-holder with square stand. (*purchased*).

6—Rush-holder and candle socket, combined. (*purchased*).

7—Two rush-holders without stands. (*purchased*).

8—Vestry candlestick and rush-holder on a sliding pedestal. (*purchased*).

Chained-Bible Table.

The writer of this note was a resident in St. Mary Bourne for 37 years, and was not aware that the Bible table was in existence till the death of the vicar, when it was taken from an old lumber room at the vicarage, and was sold with other things at a public auction, when it was purchased for the Museum. The parish books have references to it for about three quarters of a century, but it was in the church for a much longer period. It is rudely constructed of oak, 4 feet

9 inches in height, and stands on a circular pedestal with a cruciform foot, the desk being square and made to revolve, so that the books could be carried round to face the reader. And the desk can be removed by unscrewing an ornament at the top. Two strong chains are attached to it to secure the books, one of the clips to which a book was secured still retaining a scrap of binding. In the following references from the parochial records, Reading is mentioned in association with the Book of Martyrs, which was one of the chained books; and the Bible is stated as the other.

"1683.—pd. Acct. of Robert Thorngate and Robert Holdway; paid for a horse to fetch the Book of Martyrs from Redding, 3s."

"1683.—pd. Wm. Poare for binding ye book, 16s. 6d."

"1706.—pd. for a chaine for ye book, 1s," (As this entry refers to ye *(the)* book, the Bible is probably meant, particularly as chains for the Martyrs' Book are referred to later).

"1752.—Apl. 1st, pd. for two chains for Martyrs' Book, 3s."

"1752.—Apl. 1st, for binding ye Martyrs' Book, 15s."

"1773.—Apl. 14th, for binding ye great Bible, 7s. 6d."

Bells.

FLOOR-CASE NO. 15.

Bells are interesting relics of old Reading, and speak of a time when bell-founding was a flourishing industry during several centuries, of which many of the village churches in Berkshire and Hampshire bear testimony. Bells are very ancient, and some were almost marvellous in character, for we read that bells of gold were worn by the high priests of the Israelites. Bells were also appended to the robes of the Persians. Mr. Layard found a number of bells in the ruins of Nimroud. They were used in China and in India, and examples of Roman bells are in the Museum. The early British church bells came probably through the first missionaries, St. Patrick having used them in Ireland before A.D. 493. They were small quadrangular, portable bells, of sheet iron rivetted, and coated with brass. There is a specimen of this form in the Museum, which is rare. The small silver bells worn by hawks, while hawking, were made at Milan, as were the silver bells used for prizes at horse

racés ; but these latter after the time of Charles I. were exchanged for cups, nevertheless, the phrase "to bear away the bell" remains in testimony of the old custom. Most of the bells in the Museum bear the initials of Reading bell-founders.

The bells number thirteen.

A heavy oblong iron bell, rivetted, 15th century, *in Wall-Case 1*. It might be a hand call bell to some small village church, or perhaps a curfew bell. It is Celtic in character, and too cumbrous for a cattle bell. (*Mr. Joseph Humphrey*).

A Celtic bell of sheet iron, rivetted, and brass coated, from the Kennet. (*Stevens*).

A rude oval brass cattle bell, rivetted, such as was worn by cattle when pasturing on the commons, at the time the lands were cultivated in common.

A small antique bell, with a chain clapper. (*Davies Coll.*)

A small sonorous bell of white metal, such as might have been carried by an acolyte. It bears a small badge, with the initials S. C. : (*Samuel Carter*). The Carter family were bell-founders in Reading in the 15th and 16th centuries.

A heavy globular bell, one of a farmer's market set used at the end of the 18th century ; but they were much earlier, as shown by the initials R. W. of its maker. Richard White, a bell-founder in Reading in 1520. The universality of market bells among farmers in early times was the giving warning to any counter traffic in the narrow roads of the period ; but the writer has heard carters state as a further motive for their use, that of searing away the demons of the night from obstructing the wains by placing *spells* on the wheels. (*Stevens*).

Globular pack-horse bells, bearing the initials R. W., the same founder as before ; and I. C., John Carter, a bell-founder in Reading in the 17th century. (*purchased*).

Four small globular dog bells, one bearing the initials I. C. : or they might be ladies' harness bells, as one carries a fragment of iron rod for fixing. (*Stevens*).

Padlocks and Fetlocks.

WALL-CASE No. 13.

Padlocks are of early date, and were used by the Romans for fastening gates, etc., as in England. Several specimens found at Silchester are in the Reading Collection. Of the local padlocks in *Wall-Case 13*, one or two are of peculiar interest from their association with village stocks to which they were appended. Some of the large open forms are fetlocks ; and they were employed to hobble

horses pastured on the open fields and commons, when the land throughout the country was cultivated on the common field system.

An antique padlock used on the village stocks, St. Mary Bourne. (*Stevens*).

A padlock from village stocks. (*Mr. S. Pamplin*).

A boatlock with copper coating. (*Mr. G. Long*).

A heavy fetlock, used for hobbling horses.

Two padlocks, in *Case 17*. (*Mr. W. I. Palmer*).

HORSE-SHOES.—A few horse shoes occupy the same Case, which were found in a cutting at Shooter's Hill, and were sent to the Museum by Mr. Cox, of Pangbourne. Two of the forms have been considered Roman, but they are not of great antiquity. But there are three shoes, in *Wall-Case 12*, of undoubted Roman character: they are rare, and the plates are indented on their outer edges, which is Roman design. They were dug up in Reading, on the south of the Thames. One of the Pangbourne shoes is remarkable for its size, and the width of its plates; but the iron is thin, and implies economy or scarcity. Iron was scarce in the 13th century, and was sold in bars, of about four pounds in weight, at the great fairs, and was served out by the bailiffs to the smiths, the weight being debited to them. Steel was employed to edge iron tools, but it was four times dearer than iron. The heavy cost of iron necessitated the frequent use of cart wheels made from the section of a big tree, and not shod with iron. The ploughshare was of wood, protected with clouts or plates of iron nailed to it, and harrows made with iron tines were unknown, oak pins being used instead; and the shoes of horses and of oxen were very thin and light.

One of the horse shoes in the Museum is peculiar in having bars between the plates, as if to protect a diseased foot.

SUNDRY DOMESTIC ARTICLES.—*Turret-Case 22* contains two examples of Ember-tongs, with Tobacco-stoppers. One is from St. Mary Bourne (*Stevens*), the other purchased. Their interest rests in their association with a period when wood logs were burnt on the hearth, and the office of the tongs was the grasping of a small ember to light the pipe. They belong to the 18th century and later; and of the same period are six brass Tobacco-stoppers in *Wall-Case 12*. They are ornamented with designs of Britannia, a cavalier, etc.; and were added to the collection by Mr. C. Clark, Mrs. Turrell, and by purchase. A heavy lead Tobacco Box, of similar date, also occupies *Case 22*. It is ornamented with tobacco pipes: (*purchased*).

Bits and Stirrups.

In Wall-Case No. 11, there is a rare and powerful form of Merovingian bit from the Thames. It is a heavy snaffle with strong grip. (*purchased*).

Another remarkable form, but of late date, is a peculiar Bridon (*in Wall-Case 12*) apparently for breaking savage horses. It is a snaffle, but the mouth-bars are hollow, and their edges are serrated in a very cruel fashion. (*Stevens*).

In Stirrups there are five iron, and one pair of clog stirrups, which are perhaps Hungarian or Spanish.

The stirrup was not used before the 14th century. It was at the outset simply a strap, to which subsequently a bar of wood or metal was added, as a rest for the foot. A twisted leather thong was one of the earliest straps, and the Museum contains a survival of this type in an iron stirrup with twisted side-bars, and the ring for the reception of the saddle-strap is formed by the twisting of the side bars. Another peculiarity of this stirrup is that the loop stands at right angles to the bars, and not parallel to them as in stirrups generally.

2—Another stirrup of a similar form.

3—A stirrup with a square loop, and expanded sides for large boots, from Reading Abbey.

4—A stirrup with an oval swivel loop, from the river Loddon. (*Cooksey Coll.*)

5—A handsome ornamented stirrup of the 16th century, *in Turret-Case 22*. The side bars are double, with designs in which horse shoes are introduced between the bars. It was dug up in Cross Street. (*Stevens Coll.*)

6—A bronze stirrup with waved edges to the foot bar, and the side bars flattened and bent inwards for the reception of the boot. (*purchased*).

Strike-lights.

TURRET-CASE No. 22.

The earliest method of obtaining fire is that adopted by the Bushmen and the Polynesians, who simply use friction with wood. The former rotates a stick rapidly between his hands in a hole in a block of dry wood till the dust rubbed off by the process ignites: the Polynesian varies the method by rubbing the stick backwards

and forwards in a groove in the wood. The earliest strike-light found in England is that of the common flint flake with iron pyrites, of which three examples are in the Museum. The igniting matter, or tinder, if it may be so called, was probably dried fungus obtained on the downs. As strike-lights of this primitive form are found in burial places with the dead, it is believed that they were used by the people of the Early Celtic Age. It might be observed that flint flakes of the scraper form are found among the Roman relics at Silchester, which would imply that the flint and steel striker were employed by the Romano-Britons. At all events the old iron tinder box, with its flint, steel, and sulphur matches, was the great source of ignition in England till the beginning of the present century, when friction matches of phosphorus and nitre came into use. There are good grounds for believing that the discovery was made in Reading, about 1838, by the present Sir Isaac Holden, who was at that time an assistant master at a school in Castle Street. These were followed by the handier and safer method of transferring the phosphorus to the frictor, and retaining the nitrate or chlorate of potash on the match.

A flint-flake and iron pyrites, much worn from use, found at Rooksdown, Basingstoke. (*Cooksey Coll.*)

An iron tinder-box, tinder, flint-flake, and iron striker. (*Cooksey Coll.*)

An iron tinder-box, flint-flake, and sulphur matches. (*Mr. House.*)

An iron tinder-box, and strike-light, a different form. (*Davies Coll.*)

A wood tinder-box, striker, flint, and brimstone matches. (*Mr. W. Salt.*)

A pocket strike-light, for pic-nic purposes. (*Davies Coll.*)

A pistol tinder-box, matches, and candlestick combined. (*Mr. R. Tims.*)

A pistol tinder-box, and candlestick. (*Davies Coll.*)

These pistol forms were probably for the military, and other persons camping out.

Pin-making.

CENTRAL FLOOR-CASE NO. 16.

The President of the Society of Antiquaries, Sir John Evans, once enquired, on seeing a certain bone article in the Museum, whether there had been a needle manufactory at Reading, when he was informed that pins had formerly been made at the

Oracle in Minster Street. The object referred to is a wrought shank-bone, which was found with some coarsely made pins, in digging foundations in Friar Street. The bone is cut square at one end, and in each square are a number of clefts or slits in which the points of the pins appear to have been rounded and polished. A short time later six similar shank-bones were dug from the foundations of Mr. Colebrook's premises in Broad Street. They occupy a card *in the same Case*, and some of the implements are stained green from the verdigris of the pin-metal with which they most likely have been in contact. It might shortly be stated that the *Oracle* passed through some vicissitudes, and in its later period was used as a manufactory of pins, silk, string, and hemp for sacking, etc. It is well known that the gates still stand on Mr. R. Hewett's premises, St. Mary's Hill, and bear date 1628, with the initials I. K., in reference to John Kendrick, who was a woollen merchant, and who left a legacy in 1624 with the object of encouraging the woollen trade.

1—A bone pin-making implement (*in Case 16*) with two pins, found in Friar Street.

2—Six similar bone implements, found in Broad Street. (*purchased*).

The Corporation Pewter Plate.

WALL-CASE NO. 15.

In July, 1896, the Corporation of Reading deposited in the Museum the following pewter dishes, a plate, and spoons, which are part of the old Corporation dinner service used at the banquets and on similar occasions :—

1—A large old pewter dish, bearing the Arms of the Borough engraved on the rim, with other marks which led to its being identified as made by John Silk, about 1693.

2—A large pewter dish, bearing marks on the back indicating that it was made by Edward Ubbby, about 1716.

3—A large dish, bearing marks indicating that it was made by John Ubbby, about 1732. It bears inscribed on the rim, "The Corporation of Reading."

4—A large dish, bearing engraved on the rim a crown and a head of a woman. It is believed to have been made by John Ubbly, about 1732.

5—A small pewter dish, bearing on the rim "The Corporation of Reading," and marks that it was made by John Ubbly in 1732.

6—Two small pewter dishes, inscribed on the rims "The Corporation of Reading," and bearing marks that they were made by Edward Ubbly, about 1716.

7—A worn pewter plate, appearing to have been in the fire. The figure of a bird is engraved on the rim, and it bears marks indicating that it was made by Chamberlain, about 1732.

8—A pewter spoon, made by H. Joseph, about 1736. Eight additional spoons are in the collection.

It appears that John Silk was admitted to the freedom of the Pewterer's Company about 1693; Edward Ubbly was admitted about 1716; John Ubbly about 1732; Chamberlain about 1732; and H. Joseph was admitted to the Pewterer's Company about 1736.

English Coins.

COIN-TABLE NO. 2.

The *Table-Case for Coins* contains, with a miscellaneous collection of other coins, about 71 silver and other issues of the English series; a small contribution from so large and varied a coinage as the British. But few purchases have been made, those present having chiefly been picked up in the Borough and its neighbourhood. There are some interesting silver pennies from Ethelred and Edward the Confessor to Edward III. A few Tudor shillings; and some groats and half-groats in very good condition. Crowns, half-crowns, sixpences, fourpences, threepences, and twopences. There is also a florin of Charles the Bold, from Mr. H. M. Wallis. The coins are all labelled, and the names of the donors are placed with their contributions. Five coins from Turkish Arabia are from the Rev. H. M. Sutton.

Lead Tokens.

COIN-TABLE NO. 2.

In the 16th century lead tokens were very generally used by tradespeople. They were struck in this material, and bore some simple device such as a cross, a star, or a shield impressed on one side, the other bearing rudely figured letters, sometimes a single letter, probably the initial of the coiner. These pieces commonly escape attention on account of their insignificance and apparent worthlessness. Mr. Hedges (*History of Wallingford, vol. II., p. 172*) states that a considerable number of them were found in that town a few years ago, on removing the floor of the old prison under the town hall. When the old Almshouses in St. Mary's Butts were removed, a number of lead tokens were found under one of the hearths. As these houses were built in 1477 the date would accord with the date lead pieces were in circulation. It appears that this form of issue by tradespeople continued until 1603, the second year of the reign of James I. Some of the lead pieces might have been used as counters or as trademarks.

There are 22 lead issues in the Museum, of which six came from Mr. Cordery at the time of the removal of the Almshouses. Four were contributed by Mr. Goodchild, and the others were discovered in the Market Place. They bear various designs, such as a Catherine wheel, cross bars, initials, and in some cases human heads, with the date 1682. There are two sizes as if bearing different values. Some of the smaller tokens contain Greek crosses with pellets in the angles, a form which would imply a date for them of about the 15th century. The initials might be those of the issuers. Four tokens of large size, with initials, have lately been added by Mr. Perry.

Trade Tokens of the 17th Century.

COIN-TABLE NO. 2.

In 1613 the prerogative of striking copper money was granted to John Baron Harington, for a money consideration; but the patent was granted for farthings only. When Charles I. came to the throne this patent was renewed; but the privilege was greatly

abused. Unreasonable quantities of this issue of merely nominal value were introduced, some of the coins, according to Boyne (*Tokens of the 17th Century*), weighing only six grains each. Imagine six grains of copper as a medium of exchange for silver! The entire country became inundated with them. Small tradesmen were drained of their gold and silver by the exchanges with these copper farthings, which accumulated on their hands, and caused great loss from the refusal of the patentees to make the rechanges; and their clamour brought about the suppression of the issue by the House of Commons in 1644, an order being made that the farthings should be rechanged from money raised on the estates of the patentees. On the death of the King an end was put to the exclusive privilege of coining copper and brass; and the trade tokens, which form the subject of these notes, immediately began to be issued, and were circulated without authority.

The tokens were in circulation about a quarter of a century. They were issued by corporations, in their corporate capacity, as well as by tradesmen. To make the rechanges as convenient as possible, tradesmen kept boxes with divisions, in which the coins of the various trades and corporations were sorted; and after a sufficient number were collected they were returned to the issuers to be exchanged for silver. They originated with a public necessity; but became a nuisance in the end. In many cases they were used as a kind of advertisement, and being payable only at the shop of the issuer they were very inconvenient. The Government had for a long time intended the issuing of royal copper money; but it was not till 1672 that the farthings of Charles II., of similar size to those now issued, were sent into circulation. The trade tokens were then at once suppressed by royal proclamation, on the 16th of August, in the 24th year of the reign of Charles II.

The earliest dates on the tokens are 1648, 1649 and 1650; but those of these years are scarce. After 1650, until 1660, they are more plentiful; but nearly the whole of them are farthings. They are most prolific in the years from 1665 to 1669. After the date of the Restoration of Charles II. half-pennies become common, and there are a considerable number of pennies. The earliest Reading token we have been able to find bears date 1652, and the latest 1669.

LIST OF READING TRADE TOKENS.

- Ob.* EDWARD. BOWLAND.
Rev. IN. READING. 1666.—E.B.
- Ob.* WILLIAM. LOVEGROVE.
Rev. IN. READING. 1664.—W.L.
 Design in the centre, a *Rope-winch*. He was most likely a *Cordwainer*.
- Mr. W. L. Nash has sent the following :—
- Ob.* WILLIAM. BURLY.—A hand holding a glove.
Rev. IN. READING. 1655.—W.E.B.
- Ob.* HENRY. HEAD. IN.—A Plough.
Rev. READING. 1652.—H.C.H.
- Ob.* HENRY. WHITEELL.—A woman making cheese.
Rev. IN. READING. 1656.—H.I.W.
- Ob.* THOMAS. WINCKELLS.—Three Stars.
Rev. IN. READING. BAKER.—T.A.W.
- The next in the Series have been furnished by Mr. Gallichan ;—
- Ob.* MARY. BLOWER.—The Grocers' Arms.
Rev. OF. REDING. 1652.—M.B.
- Ob.* JOHN. PHIPS.—The Tallow-chandlers' Arms.
Rev. OF. READING. 1655.—I.E.P.
- Ob.* JOHN. WILDER. The Younger.—I.T.W.
Rev. IN. READING. 1652.
- The following Reading Tokens are in the Museum :—
- Ob.* SOLOMAN. BARNARD.—A Rabbit.
Rev. IN. REDING. 1653.—S.F.B.
- Ob.* FRANCES. BROWN.—The Bakers' Arms.
Rev. BAKER. OF. REDING. F.K.B.
- Ob.* THOMAS. BYE. OF.—A Mill Cramp.
Rev. READING. MEALMAN. T.L.B.—A sack of flour.
- Ob.* ALCE. GILL. WIDDOW.—The Bakers' Arms.
Rev. IN. READING. 1666. A.G.

- Ob.* THO. KING. IVNIOR.—A Crown.
Rev. IN. READING. 1666. T.K.
- Ob.* THO. MACHIN. APOTHECARY.—The Apothecaries' Arms.
Rev. IN. READING. T.M.M.
- Ob.* WILLIAM. MALTHVS. W.M.
Rev. IN. READING. 1653.
- Ob.* DANIELL. MARTIN. D.E.M.
Rev. IN. REDING. GARDNER. 1653.
- Ob.* JOHN. PAICE. AT. THE.—An Angel.
Rev. IN. REDDING. 1666. I.E.P.
- The Messrs. Ferguson who now occupy the Angel in Broad Street, which was formerly an inn and posting house, have in their possession a farthing similar to the above.
- Ob.* THOMAS. PHIPPS.—A Chandler.
Rev. OF. REDDING. 1652. T.E.P.
- Ob.* IOELL. STEVENS.—The Grocers' Arms.
Rev. IN. READING. 1652. I.D.S.
- Ob.* WILLIAM. TAYLOR.—St. George and the Dragon.
Rev. IN. REDING. 1658. W.M.T.
- Ob.* RICHARD. HELLOWS.—Crossed Stockings.
Rev. IN. READING. 1656. R.M.H.
- Ob.* RICHARD. LEVENS.—Cordwainers' Arms.
Rev. IN. REDDING. R.M.L.
- Ob.* CLEMENT. MARLOW.—At the Bell.
Rev. THE. BELL. IN. REDING. C.G.M.
- Ob.* THOMAS. UNDERWOOD.—A pair of Scissors.
Rev. IN. READING. 1666. T.M.U.
- Ob.* NICHOLAS. PRINCE.—Prince of Wales's Feathers.
Rev. IN. READING. GROCER. N.A.P.
- Ob.* RICHARD. STOCKWELL.—Salters' Arms.
Rev. IN. READING. 1656. R.E.S.
- (Of donors of Token Mr. Levi Hunt should be named, who contributed six).

On November 17th, 1885, twenty-four farthing tokens were found in a hollow in a corner stone of the old Bull Inn, at the corner of Cross Street. The following is a list of them ; but as Barnard,

Frances Brown, Burly, Machin, Martin, Taylor, and Underwood are already listed it will not be necessary to reprint them. It is evident that the tokens had been contributed by neighbouring tradesmen and others at the laying of the foundation stone.

Ob. JAMES. BLVNT. AT. BLACK-HORSE.

Rev. IN. READING. 1666. I.E.B.

Ob. RICHARD. BROWNE.—Bakers' Arms.

Rev. BAKER. OF. REDING R.B.

Ob. ROBERT. CREED. — Grocers' Arms.

Rev. IN. READING. 1655. R.C.

Another Token of Creed.

Ob. JOHN. HARRISON. 1666. — A Candlestick.

Rev. LIVEING. IN. READING. I.H.
John Harrison was Mayor of Reading

in 1647.

Ob. EDWARD. PINNILL. 1665.

Rev. IN. READING. E.A.P.

Ob. ROBERT. PIDGION. R.E.P.

Rev. IN. READING. 1663.

Ob. ROBERT. SMART.—A roll of bread.

Rev. IN. READING. R.A.S.

Ob. FRANCIS. TASSELL.—Head of Charles II.

Rev. IN. READINE. 1663 F.E.T.

Ob. JOHN. CLEMENTS.—A pitcher.

Rev. IN. WOKINGHAM. HIS. HALF-PENY.

Ob. THOMAS. COCKE.—A cock.

Rev. IN. BICKONSFIELD. T.K.C.

Ob. IOHN. GODDARD.—A sugar-loaf.

Rev. FARNHAM. IN. SVRREY. I.B.G.

Ob. THOMAS. GRAPE.—A lion rampant.

Rev. IN. WOKIGHAM. 1667. T.D.G.

Same as preceding Token.

Cripple Farthing :—

Ob. HELP. O. ANDEVER. 1666.

Rev. BENEFIT. FOR. YE. POORES.

In addition to the Reading issues, the Museum contains Tokens of Newbury, Bucklebury, Wallingford, Wokingham, and Wantage, the particulars of which need not be given.

A discovery some few years ago brought to light the form of apparatus used by tradesmen in striking off tokens. The press and dies used by Edward Wood and his son Richard, of Chesterfield. They were found in the house after the death of Edward Wood. The dies were cut on two small pieces of steel, each welded on a large block of iron. The press consisted of four pieces of oak, about 4 inches thick, strongly dovetailed together. In the upper cross-piece was fixed an iron box and screw, on the bottom of which was one of the dies, whilst the other was received into a square hole made in the bottom cross-piece, where it lay as in a bed. The screw was worked by the hand in the manner of a capstan, by means of four handles, each about 9 inches long. (*See Gentleman's Magazine, vol. xxvii., page 499*).

Tokens issued by Mr. J. Berkeley Monck,
of Reading.

COIN-TABLE No. 2.

Although of a totally different character to the 17th century tokens, some private issues were made as late as the end of the reign of George III. by Mr. J. Berkeley Monck, for the benefit of the trade of Reading. These coins are of great local interest; and specimens of the different types have been added to the Museum collection by Mr. W. B. Monck. The issue consists of one gold and two silver pieces, the former bearing date 1812, and the latter 1811. Mr. Mann, who furnishes a plate of these issues (*History of Reading, page 113*), but gives an insufficient account of them, says that in 1812 the inhabitants of Reading were much distressed by the want of a circulating medium, owing to the war on the continent, and the constant drain of specie for the payment of our forces in Spain, the consequence was that J. Berkeley Monck, Esq., of Coley House, issued gold and silver tokens to a large amount, which were a great relief to the trading part of the community.

These and similar tokens were suppressed in 1813; and on September 19th of that year more than one hundred of the tradesmen and inhabitants of Reading returned thanks to J. B. Monck, Esq., for the convenience afforded to them by the issue of his silver tokens, and expressed their surprise that an Act should have been passed prohibiting the circulation of gold and silver tokens after the 25th March next, without any provision for the future supply of silver either from the Mint or from the Bank of England. (*Morning Chronicle, September 24th, 1812*).

SPECIFICATION OF MR. J. BERKELEY MONCK'S ISSUES.

The Gold piece bears :—

Obverse—Head of Alfred the Great, with Crown and Sceptre.

Exergue—PIGNORA CERTA PETIS DO PIGNORA CERTA 1812.

Reverse—40 SHILLINGS BERKS TOKEN—STANDd. GOLD—6 DWTS.
18 GR.—READING.

Exergue—PAYABLE IN BK NOTES AT 6s. THE DWT. BY I. B.
MONCK ESQRE.

The large Silver Coin contains :—

Obverse—The *Borough Arms* of Reading. E. R.

Exergue—LABIMUR IN PEJUS DONEC MELIORA REVERTANT 1811.

Reverse—HALF CROWN TOKEN—SPAN. DOLL. SILVER—6 DWTS.

Exergue—PAYABLE IN BANK NOTES BY I. B. MONCK ESQR.
READING.

The smaller Silver Coin reads :—

Obverse—The *Borough Arms* of Reading. E. R.

Exergue—LABIMUR IN PEJUS DONEC MELIORA REVERTANT—1811.

Reverse—18 PENCE TOKEN—SPAN. DOLL. SILVER 4 DWTS.

Exergue—PAYABLE IN BANK NOTES BY I. B. MONCK ESQR.
READING.

A similiar Coin to the above, the gift of Mr. W. L. Nash, may be seen in *Reverse*.

A Half-crown Token of the same type has also been added to the series by Mr. Panter.

The suppression of the coining of trade tokens, in 1674, did not entirely stop the practice of introducing private issues, many tradesmen in the provinces having struck small copper pieces for their own use throughout the reign of George III. Mr. Butler, of Chatham Street, has lately brought to my notice a copper farthing from its size, although it is probably a halfpenny, which was issued in 1835, by a Mr. Champion, of Nettlebed. He is described on the coin as a grocer and ironmonger; and the piece bears an armed figure on horseback, on its *reverse*. The coin is well executed; and as in the case of all of the more recent issues forms a striking contrast in art to those of earlier date. I have just been informed that, as late as 30 years since, a Mr. Poole, who was a grocer at the corner of King's Road, Reading, issued trade farthings, which are still known as "Poole's Farthings."

Iron Weapons and Tools, of various periods.

WALL-CASE NO. 13.

The weapons in the following list vary largely in character and period. The earliest are probably late Celtic; but there are two of Norman character, one of which, a *Francisca*, or French battle-axe, found in digging a road near Hastings Downs, is undoubtedly

Norman, and such as was used at the time of the Norman Conquest.

A Sword (late Celtic ?) from a camp at Burton-on-Water, Gloucester. It is rude, and the shoulders of the weapon at their junction with the hilt are hammered over.

Flanged-Hatchet.—It is stated as of the Early Iron Period ; but it is exactly similar to an iron hatchet in the Silchester Collection, and from this it might be inferred as Roman. (*Davies Coll.*)

A rude Bill or chopper, found on Dun-da-lamb, Laggan, Invernessshire. It appears to be Late Celtic, and probably belonged to some Highland Clan. (*Stevens*).

An early Axe of unusual shape, from the Kennet. (*purchased*).

Ditto, early form, from the Kennet. (*Mr. W. L. Nash*).

Spearhead, from the Kennet. (*Gas Works Series*).

A Spearhead. (*Mr. Howlett*).

A *Francisca* or French battle-axe, rare, from Hastings Downs. (*Stevens*).

A heavy Axe, of *Francisca* form, from the Thames. (*purchased*).

A double-edged Axe, from the Kennet. (*purchased*).

War-axe, of about the 16th century, from the Thames. This form was used in war for breaking through helmets, etc. (*purchased*).

An English Gisarme, 15th century. (*Stevens*).

A Bill of the 17th century. (*Mr. G. Long*).

A Sheath-knife, from the Thames. (*purchased*).

A Knife-dagger, from the Kennet. (*Mr. Alfred Palmer*).

A Knife, from the Kennet. (*Mr. W. L. Nash*).

A Stiletto, from the Thames, Reading.

A Bayonet, early form, from St. Mary Bourne. (*Stevens*).

A Sword-bayonet, from the Thames, 17th century. (*Mr. E. T. Jew*).

A Dagger of the 16th century. (*Stevens*).

A short Bayonet, from foundations at Caversham Bridge.

Antique Scissors, from the Kennet. (*Mrs. A. Palmer*).

A Partisan, 16th century (*Wall-Case 1*). (*Mr. S. Pamplin*).

Halberd, modern, *in the same Case*. (*purchased*).

Five Swords of various periods, *in the same Case*. (*purchased*).

A Rapier, with a triangular blade, 17th century, found on a beam in Southcot barn. (*In Turret-Case No. 22*).

A small Stiletto, with ivory handle (*Wall-Case 12*). (*Mr. C. Cooksey*).

Blunderbuss, with a bayonet, 18th century. (*In Wall-Case 1*). It is stamped with a crown over crossed swords, and bears the name I. MACE, Reading.

Military Relics.

Helmet and shirt of ring-mail, with breast-plate, found in knocking down a fort in Puducottai country, Madras Presidency. The ring-mail is placed on a bust in the Museum. (*From Col. G. E. H. Beauchamp*).

STANDING ON WALL-CASE NO. 12.

A Pot-helmet and an iron breast-plate; Cromwellian. (*purchased*).

An iron Frame-helmet, worn on the head for protection during siege operations. (*purchased*).

CANNON BALLS, ETC., (IN WALL-CASE NO. 1).

Four Cannon Balls, of various sizes, found in Reading. These balls are most likely connected with the military operations which followed the occupation of Reading by the Royal troops in 1642. There are also four bullets of various sizes which belong to the same operations. These last are in *Table-Case 15*; the same Case contains a series of recent rifle bullets, which were received from the late Major Griffiths, author of *The Artillerist's Manual*, in illustration of various late rifle introductions. They are conical, pointed-conical, partly hollowed, moulded conical, bullets with compressed centres and flattened ends, and one conical not metallic. (*Stevens Coll.*)

A plug Powder-horn made from ox-horn, about 18th century. (*Mr. C. Cooksey*).

IRON MANACLES, ETC. (IN WALL-CASE NO. 1).

Iron manacles for the waist, ankles, and wrist. (*Mr. W. I. Palmer*).

Wrist-bolts, with a peculiar key. (*Mr. S. C. Ayres*).

Three pairs of wrist-bolts; also a pair of bolts with a lock, *temp.* George I.; and a hand-cuff with a holed slide for the reception of different sized wrists. (*Davies Coll.*)

Various Relics from the 16th to the 19th Century.

ARTIFICIAL TEETH.—*In Floor-Case 15*. A small block of ivory grooved at its base for the reception of the jaw, with a rude imitation of teeth cut in the front of it; probably 18th century. Dredged from the Kennet. (*Stevens*).

Another similar block in ivory, but better wrought and later. (*From Mr. Rupert Clark*).

TAPESTRY NEEDLE.—*In Wall-Case 12*. An engraved silver tapestry needle, rare, *temp.* Queen Anne, bearing the initials I.S., from Caversham. (*purchased*).

TALLEY STICKS.—*In Central Floor-Case 16.* A pair of Talley sticks, each stick marked with three similar dots. They are of about the 18th century. Talleys were used at a period when paper was hardly obtainable, and when there was a heavy duty on it. The sticks were cut from the same block, and were exactly alike. One was kept by the employer, and the other by the servant, and similar score-marks were made on each, which it was necessary should *talley* at the time of payment. (*Mr. S. Pamplin*).

FORESTER'S AXE.—*In Central Floor-Case 16.* A forester's axe, with a saw, in the same bucks-horn handle; dredged from the Thames. The implement perhaps belonged to a forester at the time the Old Forest of Windsor extended to Hungerford. (*purchased*).

BULL-FORCEPS.—*In the same Case.* A pair of bull-forceps (bulldogs), for grasping animals by the nostrils. (*purchased*).

SPRING GUN.—A spring gun (*in Wall-Case No. 1*), with attachment for wires to the trigger, and a swivel for the gun to revolve in the direction of the disturbed wire. (*Mr. W. I. Palmer*).

Another spring gun (*in Wall-Case 1*). (*Mr. Lyford*).

SPRING LANCET.—A peculiar apparatus for bleeding cattle, found in an old house at Cholsey. (*Davies Coll.*)

MAN TRAP.—*Underneath Floor-Case No. 1.* A formidable iron man trap, from Grateley, Hants.

BRASS GLOBE.—Probably the centre of a chandelier. It bears the date 1640, with the following inscription:—"The gift of Al'ce Clarke, wife of William Clarke (midwife dwelling in the Parish of St. Giel's) in Reddinge, an^o 1640" (*in Wall-Case 1*). (*Mr. Rippon*).

SILVER CHANDELIER.—A globular body, apparently silver, from the Kennet at Reading Gas Works. It has small loops to carry short brackets to receive wax tapers, and might have been a rood-light (*in Wall-Case 1, 3rd division*). (*Gas Works Series*).

PEWTER BOWL, BASIN AND PLATE.—These three articles were dug up in Stewkley Churchyard, Bucks, at the time of the restoration of the church. On the bowl are the names "*Anthony Webb, Richard Brimer, 1731, Churchwardens.*" The cup or basin bears

a monogram on its base, with the date 1674, and the initials I.C. on the handle. The plate bears W.W. on its rim (*in Wall-Case 1, 3rd division*). (*From Mrs. F. Travers*).

Immediately underneath Group 5, *on Wall-Case 10*, are a square wood trencher with a hole in the corner for the salt, and a knife and fork of the 18th century, such as were used in farm houses. (*Stevens Coll.*) Also a large pewter dish, date 1690 (*Mr. G. C. Smith*); a pewter plate (*Stevens*), and two circular wood trenchers, of the 18th century.

RELICS INTRODUCED BY DR. HURRY.

On Central-Case No. 16, a Norwegian Spinning-wheel, as used at the present day. It resembles the better form of spinning-wheels in use throughout England in the 18th century. They were common in the houses of the yeomanry in the time of Queen Elizabeth, the cost of a "wheel" being about three shillings. A planing-board or mangle from Stockholm accompanies the spinning-wheel. It was used by the Swedes, and bears the initials B. F. D., and is dated Nov. anno 1786.

In Turret-Case No. 21, an antique carved beer tankard, from Bergen, Norway. Antique wooden loving-cup from the same locality; also a Norwegian walking-stick bearing quaint designs of a lion and crown, date 1789 (from Christiana). Model of a wooden church, Borgund, Norway, of about the 11th or 12th century. A piece of Delft-ware from Holland, and an early Delft-dish from the same locality are in the Art-room. These are donations of Dr. Hurry.

ANTIQUÉ CASKET.—*In Wall-Case 1, 1st division*. An iron casket, stated as from Reading Abbey. (*Mr. A. S. James*).

EARTHENWARE EFFIGY.—*In Turret-Case No. 22*. A remarkable figure in strong red earthenware, coated with a thick yellowish-crimson glaze, was found in the Kennet at the Gas Works. It is hollow, as if to carry a light, after the manner of a turnip lantern. From the head-dress and the character of the pottery it appears to be of about the 16th or 17th century, and might have been used in the old festivals or processions of Reading, or as a rude appendage in the Mystery plays.

ANTIQUÉ BRASS POT.—*In the Turret-Case 22.* A brass vessel with hammered body, stated as found in the Parish of St. Giles. As the parochial records of the Parish of St. Giles (see *Nash's Transcriptions*) contain entries (1518-46) of brass pots having been let out for use to certain of the parishioners at 6d. a year, it is not improbable that this pot might be one of them. *In the same Case* is a heavy tripod smelting-pot of copper, of a similar date, with decorated handle. (*Both purchased*).

BRONZE MORTAR, with pestle, bearing the following inscription:—HENRYCK . TER . HORST . ME . FECYT . A^o 1638. *In Floor of Case 17.* (*Mr. Moffatt*).

BRONZE MORTAR AND PESTLE, date 1682. *Also in Case 17.* (*Mr. W. J. Saunders*). With the bronze mortars is placed one of wood, antique, with pestle. (*Mr. J. Shilton*).

Two ornamented Wall Tiles (*in Turret-Case 22*), stated as having come from the house of John Bunyan, Lambeth. (*From Inspector Randall*).

STONE VASES.—*On the Stairs landing.* Three stone vases of the Late Tudor Period, from Cumnor Hall. They are a donation of *Mr. Alfred Bartlett*, late of Abingdon, who stated that his father traced them to Mrs. Mutrie, of Dry Sandford, into whose possession they came from Cumnor Hall.

WOOD WATERPIPE.—A length of wood waterpipe, which was part of the original main for the supply of water to the town in 1629. The pipe was found at 4 feet in depth in Friar Street, and shows the spigot and socket ends for connection. The Waterworks were transferred to the Corporation in 1868. *It also stands on the Stairs landing.*

SNUFF BOX.—A brass tobacco box, and a *papier-maché* snuff box, deposited by *Mr. Sherwood*. The tobacco box contains a Flemish inscription, and bears figures of the crucifixion, etc. The snuff box is embellished with an excellent miniature painting; and bears the following striking inscription:—"Exchanged by H.R.H. the Duke of Sussex and Prince Leopold of Saxe-Coburg." *Papier-maché* originated in snuff boxes, and is an invention of the 18th century; and the snuff boxes have been called "Martins" after their manufacturer. The box is *in Floor-Case 17.*

SILVER SNUFF BOX.—*In the same Case*, a silver snuff box with tortoise-shell lid, bearing a bust of Charles I. *Deposited by Mr. Slaughter.*

BILSTON ENAMELS.—*In the same Case.* Two examples of Bilston enamelling, the designs representing General Clinton and Admiral Rodney. *From Mr. C. B. Stevens.*

In Floor-Case 16, a rosary from Egypt, *from Mr. C. H. Hewett.*

A Japanese Creese and sheath, blade flamboyant, with hilt of wood, *in Case 16.* (*Bland Coll.*)

Inlaid Spanish knife. (*Stevens.*)

Model of a stork in bronze, *on the top of Case 16*; and a model of a young gorilla. (*Mr. W. Chapman.*)

In Floor-Case 15.—A carver and fork with buckshorn handles, the tines of the horns so arranged as to form stands. (*purchased.*)

Model of a canoe (a Catamaran), *on Case No. 16*: and a model of a cutter, Ceylon, *also on Case 16*, from *Mr. T. A. Papillon.*

Human Crania.

The Museum contains a few skulls of interest to the student of craniology; but their indices have not been taken. One or two are worth recognition from their local associations. Of these may be named a fine capacious *Cranium*, the gift of Mr. Walter Money, which belonged probably to a Knight Templar, or Hospitaller of St. John of Jerusalem. It came from Templeton, near Kintbury, the site of a Hospital of the Order of St. John in the 14th century. (*In Floor-Case 16.*)

Another capacious English skull, *in the same Case*, came to the Museum from the late Mr. J. W. Workman, who stated that it was found in the vaults of Reading Abbey.

Table-Case 1 contains a very low type of modern skull, locality not named, from Mr. H. M. Wallis.

In Wall-Case 1.—A lengthened boat-shaped skull from Sandhurst, received from Mr. Cox. It was dug up there, but no particulars could be obtained of the interment. It is important as being the only *dolichocephalic* or long-barrow form in the Collection.

The others are arranged in the *Table-Case underneath the Mummy*, and comprehend a Tartar skull (Mongolian); a skull of a West Australian, already described under *Wall-Group 6*; a *Cranium* of an African Bushman, from Mr. Weedon; an Ashantee skull, from Mr. J. W. Workman; a Chinese skull, and a Peruvian *Cranium* (*Bland Collection*); and a skull of a native South African, found in the workings of "Blue Jack's" Mine, in Matabeleland, *from Mr. F. C. Murphy*.





FOREIGN SERIES.

The Bland Collection.

THE large series of articles, known as the "Bland Collection," was removed from the Bland Museum, on Burghfield Common, into the Reading Museum, in September, 1882.

The collection is large and varied, embracing, in addition to weapons, implements, and ornaments made by man in various parts of the world, a valuable collection of marine shells and corals, these last being chiefly from the Sandwich Islands. There are, besides, some miscellaneous minerals, mostly from the Australian mines; with valuable specimens of gold quartz, and some interesting meteoric and volcanic products. Twenty cases of stuffed birds also form part of the donation, with a large case of Australian mammals, and a fine African lion in a plate glass case, mounted in Ward's peculiarly effective manner. Some portions of the collection, under the heads of Babylonian, Egyptian, and Greek, have already passed under review; but as the object of the present portion of the Catalogue refers specially to matters relating to human art and industry, all that appertains to Natural History, such as the fine series of marine shells and corals, and the minerals of the *Bland Collection*, will be reserved for *Part II* of the Catalogue.

South African Group.

AT THE END OF THE ROOM.

This fine group consists of the heads of a variety of animals killed in Africa, chiefly in South Zulu, by Mr. John Garland. Among them are horns of rhinoceros, and tusks of the male and

female African elephant. These are arranged with a series of implements and weapons from the same districts.

The following is a list of the animals :—

The Eland (<i>Boselaphus Oreas</i>).	The Sassaybe (<i>Acronotus Lunala</i>).
The Gemsbok (<i>Oryx Capensis</i>).	The Bison (<i>Bison Americanus</i>).
White-faced Antelope (<i>Gazella Albi-</i> <i>frons</i>).	The Hippopotamus (<i>Hippopotamus</i> <i>Amphibius</i>).
The Koodoo (<i>Strepsiceros Capensis</i>).	The Hartbeest (<i>Acronatus Caama</i>).
Square-nosed Rhinoceros (<i>Rhino-</i> <i>ceros Simus</i>).	The Spotted Hyæna (<i>Hyæna</i> <i>Crocuta</i>).
The Pallah (<i>Antilope Melampus</i>).	Burchells Zebra (<i>Equus Burchellii</i>).
African Buffalo (<i>Bubalus Caffer</i>).	The Brindled Gnou (<i>Connochates</i> <i>Gorgon</i>).
African Rhinoceros (<i>Rhinoceros</i> <i>Africanus</i>).	The Roan Antelope (<i>Aigocerus</i> <i>Equina</i>).
Skull of African Buffalo (<i>Bubalus</i> <i>Caffer</i>).	The Steenbok (<i>Tragulus Rupestris</i>).
African Wild Boar (<i>Phacocharus</i> <i>Africanus</i>).	The Springbok (<i>Gazella Euchore</i>).
African Elephant (<i>Elephas Afri-</i> <i>canus</i>).	The Reitbok (<i>Redunca Eleotragus</i>).
	The Duiker (<i>Cephalopus Mergens</i>).

The implements included in the group consist of bows and arrows, assegais, barbed javelins, heavy spears for thrusting, iron axes, iron hoes, and Hottentot and Kaffer knob-keries. There is also a handsome shield of pied buffalo hide. These all belong to the *Bland Collection*. But in order to render the group as complete as possible, a few South African articles are added from other sources, of which may be named a shield of black buffalo hide, a spear and two javelins taken in the Zulu war; and a domestic basin, ladle, and spoon from South Zulu (*Stevens Coll.*) The same group contains a small shield of buffalo hide, and immediately opposite it a wood shield bearing a collection of Kaffer pipes and tobacco pouches, from Mr. Swann. There is also a knob-kerry and three assegais from Mr. G. E. Minchin.

Beneath the group the following objects are placed from various contributors. A three-thonged bolas from South America (*Stevens Coll.*); a lasso, South American, from Mr. Fewster; an Indian buffalo horn from Mr. H. G. Foxell; an African dress, decorated with porcupine quills, from Messrs. Watson; and a Japanese string apron, a model of a Japanese house, and a stand of Japanese bows and arrows. (*Bland Coll.*)

PERUVIAN AMPHORA.—*In a corner of the room is placed a large Peruvian Amphora on a stand. Its dimensions are 32½ inches in depth, and 6 feet 1 inch in circumference. Like the ancient Mexican and Peruvian pottery generally, it is uncouth in outline, but is well baked; and is painted and rudely decorated, the colour in this instance being of a dull maroon-red, ornamented with what appear to be small jets of flame, suggestive perhaps of ancient fire-*

worship. It was found in a tomb, discovered in sinking the foundations of a house at Ambato, Ecuador; and was believed from the dregs remaining in it to have contained Chicha or maize beer, for the use of the occupants of the tomb. This is the rarest and most remarkable relic in the *Bland Collection*.

Wall-Cabinet No. 8 contains on its top, under a glass hood, red-glazed Egyptian pottery, pipes, etc., and in the interior of the cabinet are a variety of articles, some unimportant; but there is a Chinese teapot and cosey, and compressed tea, which is used as an article of barter.

Coin-Table No. 2 contains, among its contents, a collection of modern coins, obtained by the late Mr. Bland from Japan, China, etc., in gold and silver.

JAPANESE OBANG.

This coin is underneath a shade in *Turret-Case 22*, with three large gold nuggets, from the Australian gold mines. The Obang is a very fine coin, if a coin it can be considered, as it is chiefly used as a reward from the Imperial ruler, and usually bears the signature of the Mikado in Indian ink. It is also stamped, but the impression is the usual mint-mark, as on other Japanese coins. It is the largest gold piece in Japan, and measures about $5\frac{7}{8}$ by $3\frac{1}{2}$ inches, its weight being about 5 oz. 6 dwt. 10 grains. Its value in English money is a little over £15. It has been stated by some writers as containing a percentage of adulteration. In reference to the gold nuggets, it may be stated that *Table-Case No. 14* contains some fine specimens of gold quartz and gold dust, also brought by Mr. Bland from the Australian gold works.

In *Table-Case No. 17* will be observed a variety of articles appertaining to the *Bland Collection*, from Japan, Palestine, Egypt, Cashmere, China and Peru. They include necklaces and other ornaments from Palestine. Hebrew Synagogue manuscripts and case, and Phylacteries containing Hebrew inscriptions. Inscribed bladebones of sheep, such as are hung up as votive offerings in Buddhist temples. Small Japanese cabinets. A razor, combs, fans, puzzle-balls, trays, and fine amber for pipes, from China. Ornamented baskets, hats, shoes, a telescope, a telephonic, cigar cases, caskets, and compasses, from Japan. Engraved metal cups, ear-rings, and bracelets, from Cashmere, and sacred candles from Palestine. A silver ornamented salt-cellar from Persia. Three figures of Indians in silver amalgam, Peruvian; and an elegant tortoise-shell basin.

PRAYING-WHEEL.—(In *Floor-Case 17*). This is an example of some remarkable machines in general use among the natives of Tibet, who during their daily work attach a prayer to the cylinder, and the supplication continues while the wheel is in motion. The instrument is termed *Praising-Wheel* by Mr. W. Simpson,

who has written on it, and who regards it as a relic of Sun-worship. It is general among the Buddhists, who believing in its efficacy, and extending the custom, under the impression of the greater the number of prayers the greater the efficacy, use large cylinders filled with supplications, which are turned by the hand or by water-power. In this way unceasingly grinding out their prayer or praise by proxy.

On the top of Case No. 17 are two handsome Chinese tea-vases, and two Chinese bronze animal figures. On the floor, *underneath Wall-Case 1*, stands a heavy block of tin, brought by Mr. Bland, as a sample, from the tin mines, Van Dieman's Land.

In Wall-Case 1. Two State axes, with stone blades, and heavy square carved handles, from Mangaia, Harvey Island.

Turret-Case No. 21. Among other objects in this Case are several important additions to the *Bland Collection*. They consist of a black Peruvian vessel with spout, a black twin-bottle, also Peruvian, eight handsome dress swords from Japan, and a girdle and head-dress of a woman of Samaria. From the character of the head-dress it must have appertained to a woman of peculiar caste, as the head-dress contains a necklet of several hundred silver coins, apparently Asiatic. To the above should be added a revolving gun with a damascened barrel, a knife-dagger, and two swords, Japanese, the gift of Miss Bland, of Burghfield. And in addition to the *Bland Collection*, an embellished Mexican hunting horn in association with Mexican spurs; and a remarkable human-faced water-jar, called a *Cantero*, which was found in the same tomb as the large Amphora already described. It is of the usual painted clay, and is labelled with the following myth:—"The jar being filled with water, within half-an-hour red tears ran from the eyes, ears, nose and mouth."

Wall-Group from New Guinea.

MIDDLE GROUP ON LEFT FROM ENTRANCE.

Various spears of wood, including fish-spears. Bows and arrows, one of the bows a long and heavy form. Various paddles, including pointed war-paddles, and oval-headed paddles for canoes. Also a female dress. The various implements are of wood.

In Wall-Case No. 1, immediately underneath the Group, the upper shelves contain a variety of articles, which, with those of the Group, and others exhibited in *Floor-Case No. 18*, were collected by the Rev. W. G. Lawes in New Guinea, and purchased for the Museum by Mr. George Palmer. The series includes native female dresses, a variety of calabashes, including four large painted gourd bottles on the *Lion-Case*: a drum and other instruments of music,

a coverlet of pandanus leaves, carpets wrought in various patterns, a basket, native bags, forked fish spears, javelins, various clubs, including a mushroom-headed stone club, and axes of greenstone with wood handles and basket-sockets to secure the axes. In addition, some axes occupy *Floor-Case 3*, mounted and unmounted, with handles showing the various methods of fixing the implements.

Part of the Lawes Collection occupies the *Turret portion of Floor-Case 18*. It forms quite an epitome of the various objects which enter into the personal and domestic usages of the New Guinea natives. The series includes feather head-dresses, fibre made with human hair, necklaces and ornaments of shells, bamboo combs, shell bracelets, coloured male dresses or body bands, female dresses, netted bags, Chunam knives, a drill with flint points, a bone dagger, a musical instrument (a kind of Jews-harp), nose-pipes and reed-pipes (the last a form of Pan's-pipe), tattooing sticks of native thorn, native resin, spoons, shell knives, and ear-rings, including one of peculiar form, and rare, constructed of tortoise-shell, and claws. *On the floor of the turret* are mace-headed and mushroom-headed clubs of stone, javelins, a war-stone, serpent-sticks, native flint for making drill-points, lime gourds, a sago-beater and native sago.

In the same Case a card contains some shell necklaces, from Niue, from Miss Soundy.

Wall-Case 1 contains, also from New Guinea, some nets, a basket, a fish hook, and a carpet, from Mr. J. H. Knowles.

Soudanese Wall-Group.

FIRST ON RIGHT FROM ENTRANCE.

Soudanese shields; two fish spears, and an iron sword, taken from a battle field near Suakim; the gift of Mr. H. D. Thorngate. At the same time received from Mr. Cecil Wray, three combs, and two hair-pins of bamboo, used by the Sakeis of the Malay Peninsula. (*Floor-Case 18*).

Small Wall-Group No. 2.

SECOND ON RIGHT FROM ENTRANCE.

Sundry spears, including spears for killing fish, one being a three-pronged form; also a small bow. From Mr. T. D. Lewis.

Wall-Group of Mixed Implements.

THIRD ON RIGHT FROM ENTRANCE.

Carved axe-handles from Mangaia, Harvey Island; one of the examples contains a greenstone axe; four carved paddles from the same locality; a large wood axe ornamented with feathers, also from Mangaia; and a long fish-spear from Fiji. (*Stevens Coll.*)

Wall-Group from Upper Burmah.

FOURTH ON RIGHT FROM ENTRANCE.

- 1—A lion Standard of King's army.
- 2—Spears of King's mounted body-guard.
- 3—Dah or common sword.
- 4—Kachyen, bullet and powder-flasks (Yunan hills, near Bhamo).
- 5—A War-gong (carried by Burman Dacoits on the warpath).
- 6—Commander's Staff (taken from the river fort Kooly-gyaung).
- 7—Country Knives.
- 8—Bamboo Water-bottle.
- 9—Woon or Sun-shield.
- 10—A Shan Hat (Shan hills, near Mandalay).
- 11—Kachyen Sword (from near Bhamo).
- 12—A Singal Ball (of small Burmese cannon).

Collected during the 1885-87 campaign, third Burmese war, by the Rev. F. C. Hill, Chaplain to the Expeditionary Forces, and presented by him to the Museum.

Wall-Group from British Guiana.

FIFTH ON RIGHT OF ENTRANCE.

A Carib club, a cap of the seed-coat of the cocorite pine, arrows, bows, and a whip from the same locality. The barbed arrow is called *Sarapi*, and is used for shooting fish. The whip is known as the *Maquarri*, which is the name of a dance of the tribe of the Ardwak Indians, in which it is used, old and young being expected to engage in it. The large arrows are used in hunting the larger game by the Indians of British Guiana. Presented by the Rev. James Large.

Wall-Group from West Australia.

SIXTH ON RIGHT FROM ENTRANCE.

A group of weapons, etc., the gift of Mr. Joseph Pyke, of West Australia, formerly of Reading. The series consists of spears, native boomerangs, and a skin of the dingo or native dog. A part of the series in *Floor-Case 1* comprehends an interesting object in the shape of a native letter, and a dart edged with fragments of glass. The contact of the natives with civilization has evidently taught them that bottle-glass could be utilized with formidable effect. The glass is attached to the shaft with native gum.

The West Australian native is one of the most degraded of the human race. This is illustrated by a *Cranium* which was brought from that country by Mr. Colebrook, of Broad Street, who presented it to the Museum. The native was found in the wilds of Australia, lying dead from thirst. It is the skull of a perfect savage. The forehead depressed and retreating; the frontal flattened at the sides; the supra-orbital ridges prominent; the orbits large and gaping; and the lower jaw powerful and prognathous. (*On Floor of Mummy Case*).

Wall-Groups from the Congo.

FIRST AND THIRD ON LEFT FROM ENTRANCE.

The Groups, with the long Drum on the wall, together with the tools, weapons, ornaments and pottery from districts of the Upper and Lower Congo (*in Wall-Case 6 and Turret-Case 21*), were collected by the Revs. J. Lawson Forfeitt and William L. Forfeitt (Baptist Missionary Society), and presented by them to the Museum.

The groups consist of three paddles, the smaller used by women; two shields, three bows, two bundles of arrows, some of which bear poison; thirteen war and hunting spears, two large curved iron knives, and two sets of teeth of hippopotami. Also a female dress or apron.

The remaining articles are exhibited as already stated *in Wall-Case 6, and in Turret-Case 21*. They embrace a varied and instructive series of the tools, ornaments and weapons used in the daily avocations of the Congo natives.

Some of the implements, such as the knives and other metallic objects, and the pottery, show considerable advance in the arts, in so far as the arts administer to the daily wants of savage life. The collection comprehends a series of heavy war and hunting knives, including a fearful specimen of an execution knife. Heavy brass and copper anklets, and a necklet of great weight, one of the anklets weighing 5lbs. 8oz., and the other of copper 5lbs. 10z. A chief's war head-dress of parrot's feathers. Necklace of human teeth. Bracelets of human teeth. Ivory wristlets. Toy war-knives in case, obtained from a small boy at Bangala. A *Biti*, or native musical instrument. Hair dressing-pins from the Upper Congo. Razors, used by women to shave their husbands. Combs from the Lower Congo. Native stools from Upoto, which resemble the head-rests or native pillows used by some savage tribes. A piece of hippo hide, or kind of double thong. An ivory war-horn. A piece of native cloth from the Kassai. Grass dresses of Bangala women; also dresses of string. Square grass mats. Skins of brown deer and civet, and a piece of strong native rope.

In addition to those already noted, at a later date Mr. J. Lawson Forfeitt placed in the Museum some other articles from Central Africa, and from the West Coast of Africa. They include native pottery (*in Turret-Case 21*) from the Congo region; also knives, a sieve or strainer, a rude but remarkable painted wood mask, a rat-trap, a *Biti* or musical instrument differing from the former one. The *Biti* is simply a toy-like box, to which strips of flexible metal of graduated lengths are fastened, to vary the vibrations. In addition should be named a war-trumpet, some rattles, a pipe, a rice-dish, a large Fetich, and a long war-drum, which is placed on the wall with the other war-groups. This Fetich represents a black female, with the usual glass eyes, seated, nursing an infant. As fetiches have various functions, this one it is presumed presided over the family hearth. There is another Fetich in white wood, represented kneeling.

North African Pottery.

In Turret-Case No. 21, some vessels from Tizi, Ouzu, the capital of Kabylia, N. Africa, the donation of Dr. J. B. Hurry, will be found interesting in many of their particulars. They consist of a salver, a bottle-jug, and the same form with a spout, rendering it a vessel such as a coffee-pot, for infusions. There are two others, one appears to be a lamp in the form of a candlestick, and the other is a small tub-like basin. They are of strong clay, neatly modelled with the hand and well baked, and they are coated thickly with glazed paint, chiefly in crimson and yellow. They are also ornamented with black lines, dots, crossbars, or other rude figures, the character of the designs suggesting that they are survivals; and the forms of the vessels convey the same impression of *their* origin. The women are chiefly the potters, and it is likely that the lines, dots,

etc., were first impressed with a pointed stick on their earliest pottery, and subsequently imitated on their painted ware. The bottles are evidently modelled after calabashes or gourds, and the basins from half-gourds; but this is more observable in the Congo pottery *in the same Case*. Mr. E. B. Tylor thinks that at the outset native savages finding that their gourds, cocoa-nuts, etc., would not withstand fire, plastered them with clay, and the clay hardening in the process suggested the clay vessel. In the same way baskets which were clay-coated left the impressions of the wicker-work on the clay, and thus gave rise to the crossbar markings on their later pottery. The Congo vessels of the Messrs. Forfeitt consist of gourd-shaped water-bottles with and without handles, basins, drinking cups, pots, etc., most of them bearing the impress that their outlines were originally derived from natural objects.

Miscellaneous Articles.

The following are additions to the contents of *Turret-Case 21*. A bark-case of poisoned arrows used by the Bushmen of South Africa (*Dr. Hurry*). A jug of red ware, from Mr. H. M. Wallis, found on a sand-bank in Egypt. A pillow or head-rest from Zululand, from Mrs. Marsland. A heavy weapon armed with shark's teeth, and a three-forked form of the same implement, used by the Kingsmill Islanders, from Mr. J. R. Leslie.

Mrs. Barnes's contributions *in this Case* comprehend bows, arrows, a club and female dresses from Fiji. A Flapper used for the punishment of slaves, taken from a slave-ship. Poisoned puff-arrows, which are blown through tubes by the Dyaks of Borneo. Splits of cane and case from Borneo; the splits are planted in paths with the object of piercing the feet. Also an ivory bracelet, and Fetiches from the region of the Congo. *In Central-Case No. 17* are chop-sticks, a knife, and a tooth-pick from China (*Mrs. Barnes*). Also pellet-bows, from Nepaul, for shooting birds, *in Turret-Case 21*.

Turret-Case No. 21 further contains a stone axe, with carved handle, from Harvey Island (*Mr. H. Cowslade*). A Fiji female dress (*Rev. T. Friend*). A Maori jade Tiki or Fetich, New Zealand (*Mr. C. Cooksey*). A double and a single Fetich, African (*Stevens*). The Tiki is a queer little figure in green jade, and is worn round the neck as an image of Tiki, the god of death.

Wall-Case 1, in addition to the New Guinea articles, contains a handsome club from Fiji (*Mr. A. Beale*). A flower-headed club and an ornamented spoon (*Mr. J. R. Leslie*). A cane basket from South Australia (*Miss May*). A model of a South American Indian canoe (*Dr. Wells*); and an African comb, and a board for playing a native peg-game by the South African natives (*Stevens*). *In the third division of Case 1* are exhibited a Tamil book, written on strips of Palmyra leaves, from Ceylon, stated as over 100 years old (*Rev. D. Wood*). A

Cinghalese medical book (*Bland Coll.*) A Burmese book made from leaves of the fan-palm, from Mandalay (*Rev. F. C. Hill*). A similar Burmese book (*Miss West*). Immediately in the compartment below of *the same Case* are placed three long matchlock rifles from Northern India, and a twin knife-dagger in a sheath (*Mr. W. I. Palmer*). In *the same Case* are two Indian knives, the larger a sacrificial knife used by the Goorkhas, and the smaller is their ordinary war knife, from Lieut. Gen. Mowbray-Thompson. In *Central Floor-Case 17*, three Malay creeses or daggers, one being a flamboyant form, and a Japanese cutlass, are arranged in the name of Mrs. F. Travers.

At the upper end of the room a *Plate-Glass Mahogany Wall-Case* contains a characteristic series of Japanese figures, officials, etc., from the Rev. F. Tobin, late of Caversham.

In *Central Floor-Case No. 17*, five cards of neatly grouped Indian trinkets are from Miss King, of Burghfield. *The same Case* contains Kaffer armlets, bead ornaments, and bead bags, a Matron's necklace, and an Indian necklace, from Mr. Swann. At the end of the *Case* is exhibited a bronze medallion of Oliver Cromwell (*Davies Coll.*). In *the same Case* will be observed two characteristic Moorish vessels, and a Moorish concealed spring-lock, from Mr. S. Poulton, of Lee, Kent.

A circular table of inlaid polished marbles, of English manufacture, occupies the large window, the gift of Mr. W. H. Cooper.

Turret-Case No. 21 contains a handsome Indian panel: and lately removed from the Museum to the Art Room are an antique bronze Indian lamp and a carved box or seat, which came to the Museum from the Colonial Exhibition. The articles are a donation from Col. II. P. Hawkes, Commissary-General-in-Chief, Simla.

A grave-stone, with an inscription, taken from a burial-place at Kerch, during the Crimean War. (*Mr. C. Denton*).

Afghan rifle, in *Turret-Case No. 21*, taken at Maiwand, Afghanistan, on the day the Berkshire Regiment suffered. (*Sergt.-Major J. Neale*).

Rude carving in marble of a cow and calf, found in excavating at Kintbury. (*Mr. Powell*).

Weapons taken in the Indian Mutiny, in *Central-Case No. 16*, consisting of an ornamented dagger, a double-edged knife, and an axe with a wood handle. (*Mr. A. Henman*).

American Series.

SMALL CASE, NO. 20, SUSPENDED ON CASE 16.

During a number of years a large quantity of implements of various kinds have come to this country from America, indeed, they have become quite articles of trade. The extension of the settlements of white men over the territories of the native Red Indians

has furnished greater facilities for the investigation of the ancient burial mounds, and of the graves of the Indians. The more remarkable of these mounds occupy the vast Mississippi and Ohio areas. Some of them have received the name of animal mounds, from their resemblance to various animal forms. The figures are chiefly found in the southern counties of Wisconsin, but they occur also in the Mississippi and other districts. They are in the shape of huge serpents, lizards, frogs, turtles, birds, buffaloes, elks, bears, wolves, otters, raccoons, and even of man. In addition there are the plain mounds of the Mississippi and Ohio, and those of the Scioto Valley, in which occurs a cluster of 23 so closely grouped as to have obtained from Messrs. Squier and Davis the title of the "Mound City." Space will not permit of lengthened reference to the contents of these mounds; but from the remains discovered in them they have been called "Altar Mounds," "Mounds of Sepulture," "Temple Mounds," and mounds which having nothing in particular to distinguish them have received the name of "Anomalous Mounds." When, and by whom, these burial structures were built it is impossible to say, for even the Red Indians of the various districts have merely a few traditions concerning them. They belong to a Stone Age, inasmuch as Dr. M. W. Dickenson, who examined 150 small tumuli in the South-Western States, chiefly in Mississippi, gives the most remarkable results. In a list of the objects discovered, he states:—6,000 arrow-heads of jasper, chalcedony, obsidian and quartz, 150 arrow-heads, finely polished, under 1 inch in length, and 25 under half-an-inch in length, 1,600 unfinished arrow and spear-heads, 250 small stone axes, 40 quoits, weights, etc., 20 paint mullers, ten corn grinders, and three large stone mortars. These specimens are now in the Museum of the Academy of Natural Sciences, Philadelphia.

Smoking pipes have been met with in large numbers, in one instance 200 in one mound. And it has been conjectured whether they might not have belonged to a pipe-maker, who was desirous to finish them in the land to which he was going. These pipes are large and heavy, and are interesting on account of the materials of which they are wrought, and from the artistic carvings of the bowls in imitation of living animals. The designs are done with considerable fidelity and skill, and represent animal and vegetable objects. Among the former may be named the frog,

toad, certain serpents and lizards, and of the mammal world, the beaver, rabbit, raccoon, squirrel, wild cat, wolf, and similar forms, and even man has not escaped imitation. The list of birds is equally large, and fish are sometimes represented. The varieties of stones used in the manufacture of smoking pipes, and the methods of boring the tubes are of considerable interest to the geologist and the mechanician.

LIST OF OBJECTS IN THE SMALL HANGING CASE.

A few specimens of pipes are in this series, including flower-head and snake's-head forms from Ohio; and there is a remarkable relic, probably from a Red Indian grave—a finger-bone with a ring surrounding it formed of ten strands of iron wire. The general articles consist of a stone spear-head from Ohio; javelin-heads of stone from Ohio, North Carolina, New York, and St. Louis; javelin-points of Lydian stone from Newfoundland, stone arrow-heads from Oregon, and darts from North Carolina. A rude stone arrow-head, two drills (agate and jasper?), a perforated Celt, a quartzite gouge from New York, and a hammer-stone or sling-stone, grooved for the thong, from Ohio. A gorget, also called banner-stone, from Cherokee, North Carolina; a gorget, which might have been an ornament or badge of authority, Ohio; another specimen from Ohio, and an amalgam of lead used as paint, probably modern Red Indian. A pendant, a stone smoking-pipe, flower-headed, Ohio; a snake's-head pipe, Ohio; a pipe, flower-headed form, and three other pipes. All the pipes are of stone. (*Purchased Collection*). In the same Case are arrow-heads from Ontario (*Mr. J. E. Moody*).

Central-Case No. 16 contains a skull and the frontal of a second skull, with the accompanying bone brow-ornament, a pearl-shell necklet (?), and flint implements, found at a burial-place of the Sioux Indians, in Grand Forks Co., United States. (*Mr. T. T. Stevens*).

An Indian pipe-tomahawk of iron, found in the hollow of a tree, near Eagle Creek, Kentucky, with human bones, etc.; and two stone axe-hammers, called tomahawks, from Kentucky and Indiana, in *Table-Case 1*, from Miss Caswell. In *Turret-Case 21*, a plain terra-cotta bottle, Mexican (*purchased*); and on the top of the same Case, a large stone-coloured Amphora, on an iron stand, from Mexico (*purchased*).

THE FOLLOWING ARE IN TABLE-CASE 1.

Arrow-heads, and javelin-heads from Ohio, Indiana, and Kentucky (*Mr. H. M. Wallis*). Arrow and javelin-heads (*Mr. W. Christie*). Arrow-heads from St. Louis (*Cooksey Coll.*) Javelins, arrows and spears from Texas (*Mr. T. Lawrence*). Heavy oval quartzite battle-axe, used by the Carib Indians, St. Vincent, West Indies (*Mr. C. Bloomfield*). Lengthened oval Carib Indian hatchet, same locality (*Mr. C. Cooksey*). Two diorite axes from New York (*purchased*). Two picks for making holes for hafting, a hammer-stone, a clay disc, and mcaling-stones, from Ecuador (*Bland Coll.*) Chalcedonic arrow-tips from Columbia

(*Bland Coll.*); and a stamp or seal found in cutting a railway in Guayaquil, Ecuador, in *Case 15*, also *Bland Collection*.

Table-Case 1 continued. A fine obsidian javelin or spear, probably from New Caledonia, from Mr. Walter Palmer. Obsidian dart from the same locality (*Stevens Coll.*) A quartzite knife-flake from Queensland (*Stevens*). A Maori Celt from the Rev. Canon Slatter. A polished hatchet from New Zealand (*Cooksey Coll.*) A jade axe from New Zealand (*purchased*). A shell gouge, probably from Barbadoes or the Island of Mota, the natives of that island having in past times chiefly used shell for implements. (*Stevens*).

In *Central-Case No. 16* are a half-skull of a Basuto, used by the Zulus as a basin or dipping-vessel, from Mr. Halliday. Fish-hooks from New Zealand (*Bland Coll.*). Fish-hooks and tattooing-stick, New Zealand, from Mrs. Barnes.

In *Table-Case 1*. A heavy holed quartzite stone, used by the African Bushmen for weighting their digging-sticks, is placed in close proximity to a similar stone found in Berkshire; but it is likely the latter was not used for the same purpose. (*Mr. J. G. Christian*).

ERRATA.

Page 48, line 3, for 136 read 141.

„ line 4, for 135 read *five*; and in the same line, for *five* read 135.

